# Compendium of Exhibits to Memorandum of Law

# Exhibit A

# Union president says MLB players ready to discuss moving All-Star Game from Georgia in wake of voter-restriction laws

By **Michael Silverman** Globe Staff, Updated March 26, 2021, 12:33 p.m.


Tony Clark is the executive director of the Major League Baseball Players Association. MORRY GASH/ASSOCIATED PRESS

The 91st MLB All-Star Game is scheduled to be played in Atlanta this July. But on Thursday, in the wake of voting-restriction legislation signed into law by the Georgia

governor, the executive director of the MLB Players Association said the players are ready to discuss moving their annual midsummer exhibition out of Georgia.

"Players are very much aware" of the Georgia voting bill, which places restrictions on voting that some believe will make it particularly difficult for Black voters to reach the polls, said Tony Clark in an interview with the Globe. "As it relates to the All-Star Game, we have not had a conversation with the league on that issue. If there is an opportunity to, we would look forward to having that conversation."

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# Exhibit B

# MLB statement regarding 2021 All-Star Game

April 2nd, 2021

Commissioner of Baseball Robert D. Manfred, Jr. issued the following statement today regarding the 2021 All Star Game:

"Over the last week, we have engaged in thoughtful conversations with Clubs, former and current players, the Players Association, and The Players Alliance, among others, to listen to their views. I have decided that the best way to demonstrate our values as a sport is by relocating this year's All Star Game and MLB Draft.

"Major League Baseball fundamentally supports voting rights for all Americans and opposes restrictions to the ballot box. In 2020, MLB became the first professional sports league to join the non partisan Civic Alliance to help build a future in which everyone participates in shaping the United States. We proudly used our platform to encourage baseball fans and communities throughout our country to perform their civic duty and actively participate in the voting process. Fair access to voting continues to have our game's unwavering support.

"We will continue with our plans to celebrate the memory of Hank Aaron during this season's All Star festivities. In addition, MLB's planned investments to support local communities in Atlanta as part of our All Star Legacy Projects will move forward. We are finalizing a new host city and details about these events will be announced shortly."

# Exhibit C

Print Close

# MLB commissioner decided to move All-Star Game after pressure from Stacey Abrams on voting issues: sources

By Charlie Gasparino, Morgan Phillips

Published April 09, 2021

Fox News

Video

Major League Baseball (MLB) commissioner Robert Manfred decided to move the All-Star Game on his own after holding extensive discussions with voting rights groups associated with Lebron James, Stacey Abrams and Rev. Al Sharpton, sources familiar with the move tell Fox News.

Abrams told a senior league official that she wanted him to denounce the Georgia voting rights law, according to people with direct knowledge of the matter. People associated with Sharpton's civil rights organization, and James's voting right group, "More than a Vote" also pressured league officials, according to people with direct knowledge of the matter.

After these conversations, Manfred believed the All Star game would be turned into a political event and

players ould boycott the game, these people say. Baseball sources say that Abrams' current stance, that she is disappointed about the Georgia boycott, is suspect because she as among the most prominent political operatives to pressure the league to denounce the ne la . James has publicly supported the Georgia boycott.

People close to Manfred believe Abrams' group and Sharpton also anted the league to support other issues, including voter drives and H.R. 1, the For the People Act — s eeping election reform that recently passed the House.

"They anted us to do more than just a pre-game ceremony...Baseball ould have to be in the market for doing stuff involving voting rights," a senior MLB executive ith direct kno ledge of the matter tells Fox Ne s.

Manfred decided the easiest ay to deal ith the matter as to leave Georgia, according to a source.

After Manfred made the decision, he told the eight-member executive committee before making the announcement, hich surprised the 22 other teams. Manfred said the decision as made after discussions ith the MLB Players Association and its Players Alliance.

**GEORGIA VOTING LAW: READ FULL TEXT**

The game ill no be held in Colorado.

In a statement to Fox Ne , Abrams spokesman Seth Bringman do nplayed her role in the entire matter. "In a single, 1-on-1 conversation ith an MLB senior advisor, she urged the league to keep the All-Star game in Georgia and to speak out against the la hen they do," Bringman said.

Abrams rote on T itter last eek after the move as announced that she as "Disappointed @MLB ill move the All-Star Game, but proud of their stance on voting rights. GA GOP traded economic opportunity for suppression. On behalf of PoC targeted by #SB202 to lose votes + no ages, I urge events & productions to come & speak out or stay & fight. #gapol"

She later released another statement. "Like many Georgians, I am disappointed that the MLB is moving its All-Star Game; ho ever, I commend the players, o ners and League Commissioner for speaking out," she rote. "As I have stated, I respect boycotts, although I don't ant to see Georgia families hurt by lost events and jobs. Georgians targeted by voter suppression ill be hurt as opportunities go to other states."

Representatives for James and Sharpton did not respond to requests for comment.

Charles Gasparino joined FOX Business Net ork (FBN) in February 2010 as Senior Correspondent.

https:// .foxne s.com/politics/stacey-abrams-urged-mlb-commissioner-move-all-star-game

# Exhibit D

Sports Facility Reports

# MAJOR LEAGUE BASEBALL

*{Appendix 1, to **Sports Facility Reports**, Volume 21}*
***Research completed as of July 15, 2020***

## Team: Arizona Diamondbacks

**Principal Owner:** Ken Kendrick
**Year Established:** 1998
Team Website
Twitter: @Dbacks

**Most Recent Purchase Price ($/Mil):** $238 (2004)
**Current Value ($/Mil):** $1.29 billion
**Percent Change From Last Year:** 0%

**Stadium:** Chase Field
**Date Built:** 1998
**Facility Cost ($/Mil):** $354
**Percentage of Stadium Publicly Financed:** 75%
**Facility Financing:** The Maricopa County Stadium District provided $238 million for the construction through a 0.25% increase in county sales tax from April 1995 to November 1997. In addition, the Stadium District issued $15 million in bonds that are being paid off with stadium-generated revenue. The remainder was paid through private financing, including a naming-rights deal worth $66 million over thirty years and the Diamondbacks' investment of $85 million. In 2007, the Maricopa County Stadium District paid off the remaining balance of $15 million on its portion of Chase Field. The payment erased the final debt for the stadium nineteen years earlier than expected.
Facility Website
Twitter: @ChaseField

**UPDATE:** The Diamondbacks are focused on staying at Chase Field for the foreseeable future, according to President Derrick Hall. A lawsuit with Maricopa County was settled in May 2018, resulting in the team's approval to begin looking elsewhere for a new home. However, the D-backs

subsidized an artificial turf last year, replacing problematic grass and host a number of other events. If the team were to leave early (the original contract required them to stay through 2028), they would have to pay fines of between $5 and $25 million.

**NAMING RIGHTS:** On June 5, 1995, the Arizona Diamondbacks entered into a $66.4 million naming-rights agreement with Bank One that extends over thirty years, expiring in 2028, and averages a yearly payout of $2.2 million. In January 2004, Bank One Corporation and J.P. Morgan Chase & Co. merged and announced they were phasing out the Bank One brand name. In 2005, the name was changed from Bank One Ballpark to Chase Field.

## Team: Atlanta Braves

**Principal Owner:** Terry McGuirk (Liberty Media)
**Year Established:** 1871
Team Website
Twitter: @Braves

**Most Recent Purchase Price ($/Mil):** $400 (2007)
**Current Value ($/Mil):** $1.8 billion
**Percent Change From Last Year:** +6%

**Stadium:** Truist Park
**Date Built:** 2017
**Facility Cost ($/Mil):** $672
**Percentage of Stadium Publicly Financed:** 58%
**Facility Financing:** The new stadium was constructed in a public/private partnership with a project budget of $622 million. Cobb-Marietta Coliseum & Exhibit Hall Authority issued up to $397 million in bonds for the project. The county raised $368 million through bonds, $14 million from transportation taxes, and $10 million cash from businesses in the Cumberland Community Improvement District. The Braves contributed the remaining money for the park.
Facility Website
Twitter: @TruistPark
**UPDATE:** SunTrust Park opened in 2017, and in December, 2019, there was a merger between SunTrust and BB&T, creating Truist. The name change to Truist Park represents the continuation of the naming-rights partnership that began when the park was built. Major re-branding is in place for the 2021 season, but the Truist Park sign and colors are already visible to fans.

**NAMING RIGHTS:** In September 2014, it was announced that the Braves had signed a twenty-five-year naming-rights deal with SunTrust Banks, now Truist, for the club's new ballpark in Cobb County. The worth is in excess of $10 million per year, according to sources. The deal includes activation that includes signage inside and outside the ballpark, a revival and expansion of the SunTrust club previously at Turner Field, and some type of retail banking presence for Truist in the large mixed-use development being constructed adjacent to the facility, among other assets.

## Team: Baltimore Orioles

**Principal Owner:** Peter Angelos
**Year Established:** 1901
Team Website
Twitter: @Orioles

**Most Recent Purchase Price ($/Mil):** $173 (1993)
**Current Value ($/Mil):** $1.4 billion
**Percent Change From Last Year:** +9%

**Stadium:** Oriole Park at Camden Yards
**Date Built:** 1992
**Facility Cost ($/Mil):** $110
**Percentage of Stadium Publicly Financed:** 96%
**Facility Financing:** The project was financed with $137 million in lease revenue bonds and $60 million in lease revenue notes issued by the Maryland Stadium Authority. Revenue generated by special sports-themed lottery tickets is paying the debt. The remaining costs were covered with cash that accumulated in the lottery fund that was established in 1988 to finance sports stadiums. The team contributed $9 million for the construction of skyboxes. The Maryland Sports Authority spent $1.5 million on improvements in 1998.
Facility Website
Twitter: N/A

**UPDATE**:
As reported by **The Baltimore Sun**, the team is in discussion with the Maryland Stadium Authority regarding a new lease. Many upgrades could be done, including the scoreboard and the concession stands. However, there are no immediate plans to renovate the stadium's services.

**NAMING RIGHTS:** In September 2001, the Maryland Stadium Authority amended its lease with the Orioles, giving the team the authority to enter into a naming rights agreement. However, as of June 2010, the Orioles had not entered into a corporate naming rights agreement for their stadium. There are no current plans to change the name.

## Team: Boston Red Sox

**Principal Owner:** John Henry and Tom Werner
**Year Established:** 1901
Team Website
Twitter: @RedSox

**Most Recent Purchase Price ($/Mil):** $380 (2002)
**Current Value ($/Mil):** $3.3 billion
**Percent Change From Last Year:** +3%

**Stadium:** Fenway Park
**Date Built:** 1912
**Facility Cost ($/Mil):** $650 thousand
**Percentage of Stadium Publicly Financed:** 0%
**Facility Financing:** The cost of constructing the stadium was funded entirely with private money. The facility underwent a $285 million makeover that was publicly funded.
Facility Website
Twitter: @fenwaypark

**UPDATE:** This year, Fenway Park will have completed renovations on the bleachers in the stadium, including other interior renovations such as concession stands and restrooms. The Red Sox are also planning on developing a parcel of land behind the stadium to include a theater. The renovations and extensions are awaiting city approval; the Red Sox are looking to begin construction on the theater in 2021.

**NAMING RIGHTS:** Former Boston Globe Owner General Charles Henry bought the team for his son, John Taylor, in 1904. After changing the name from the Pilgrims to the Red Sox in 1907, Taylor announced plans to build a new ballpark in 1910. Taylor called the new ballpark Fenway Park because of its location in the Fenway district of Boston. There are no current plans to change the name.

## Team: Chicago Cubs

**Principal Owner:** Ricketts family
**Year Established:** 1876
Team Website
Twitter: @Cubs

**Most Recent Purchase Price ($/Mil):** $700 (2009)
**Current Value ($/Mil):** $3.2 billion
**Percent Change From Last Year:** +6.89%

**Stadium:** Wrigley Field
**Date Built:** 1914
**Facility Cost ($/Mil):** $250 thousand
**Percentage of Stadium Publicly Financed:** 0%
**Facility Financing:** Restaurateur Charles H. Weeghman privately funded the entire cost of the ballpark.
Facility Website
Twitter: N/A

**UPDATE:** Major renovations were done last year, premiering in 2019. Extensive additions were made in terms of food and beverage options including plant-based products and more than 12 new draft and packaged craft beers from Midwest breweries. An expanded partnership with Terlato

Wines features options by the bottle in souvenir carafes and sampling options throughout the season. The 1060 project was completed last year to cap off a $550 million renovation to overhaul Friendly Confines. Some renovations remain unfinished. Remaining substantial work includes the renovation of the press box and the completion of the last club space in the right-field corner—the original, existing press box was constructed in 1989 and has not been renovated since.

**NAMING RIGHTS:** Originally known as Weeghman Park, Wrigley Field was built on grounds once occupied by a seminary. The ballpark became known as Cubs Park in 1920 after the Wrigley family bought the team. In 1926, the ballpark was named Wrigley Field after William Wrigley Jr., the club's owner. Although experts in sports marketing believe the sale of naming rights will prove necessary as a means of financing Wrigley renovations, the Ricketts family says it will not sell the naming rights because of the strong history associated with the ballpark.

## Team: Chicago White Sox

**Principal Owner:** Jerry Reinsdorf
**Year Established:** 1900
Team Website
Twitter: @whitesox

**Most Recent Purchase Price ($/Mil):** $20 (1981)
**Current Value ($/Mil):** $1.65 billion
**Percent Change From Last Year:** +3%

**Stadium:** Guaranteed Rate Field
**Date Built:** 1991
**Facility Cost ($/Mil):** $137
**Percentage of Stadium Publicly Financed:** 100%
**Facility Financing:** The Illinois Sports Facilities Authority issued $137 million in bonds for the land and the construction of the new stadium. A two percent hotel tax levied on Chicago hotels services the debt.
Facility Website
Twitter: N/A

**UPDATE:** Due to the Coronavirus pandemic and the shortened season, the White Sox have renovated the field and dugouts. Two bullpens with two mounds and plates were installed on the warning tracks in foul territories. Also, Goose Island Beer Co. and the Chicago White Sox have partnered up to create the Sox Golden Ale, to be sold at Guaranteed Rate Field and at retailers throughout the city.

**NAMING RIGHTS:** In August 2016, the White Sox struck a thirteen-year deal for about $25 million with Chicago based Guaranteed Rate. The deal will expire in 2029, and the average annual payout is $1.9 million.

## Team: Cincinnati Reds

**Principal Owner:** Robert Castellini
**Year Established:** 1881
Team Website
Twitter: @Reds

**Most Recent Purchase Price ($/Mil):** $270 (2006)
**Current Value ($/Mil):** $1.075 billion
**Percent Change From Last Year:** +2%

**Stadium:** Great American Ball Park
**Date Built:** 2003
**Facility Cost ($/Mil):** $291
**Percentage of Stadium Publicly Financed:** 82%
**Facility Financing:** The Reds contributed $30 million toward construction of the stadium. Rent will amount to $2.5 million annually for the thirty-year lease. However, because of the extra costs of the project, the team expanded its lease with the facility to thirty-five years. The County will pay most of the cost, using proceeds from the 0.5% sales tax increase that voters approved in 1996.
Facility Website
Twitter: N/A

**UPDATE:** In the 2020 season Great American Ball Park will be debuting its new Press Club, featuring a premier vantage point from right behind home plate, one of the most highly-coveted spots for fans. Tickets in the new club include food and beverages, as well as access to a private locker for personal drinks for use during the game. Also debuting in 2020 is a new videoboard in the outfield. The ballpark is the first MLB stadium to have all of its LED displays in high-dynamic-range format, also known as HDR.

**NAMING RIGHTS:** The Cincinnati Reds and the Great American Insurance Company agreed to a thirty-year, $75 million naming rights deal that expires in 2033. The average annual payout is $2.5 million. Cooper Tires is now the sponsor of the two Party Decks down the first base line. Laura's Lean Beef is sponsoring the decks located above the Reds bullpen in center field.

## Team: Cleveland Indians

**Principal Owner:** Lawrence and Paul Dolan
**Year Established:** 1901
Team Website
Twitter: @Indians

**Most Recent Purchase Price ($/Mil):** $323 (2000)
**Current Value ($/Mil):** $1.15 billion
**Percent Change From Last Year:** 0%

**Stadium:** Progressive Field
**Date Built:** 1994
**Facility Cost ($/Mil):** $175
**Percentage of Stadium Publicly Financed:** 88%
**Facility Financing:** The stadium was built as part of a city sports complex that was funded both publicly and privately. The Gateway Economic Development Corp. issued $177 million in bonds backed by voter-approved countywide sin taxes on alcohol ($3/gallon on liquor, 16 cents/gallon on beer) and cigarettes ($0.045/pack) for fifteen years. It also issued $31 million in stadium revenue bonds. The Gateway Economic Development Corp. received about $20 million upfront from early seat sales.
Facility Website
Twitter: N/A

**UPDATE:** Plans for 2020 and beyond include a "re-imaging" of the stadium and the ballpark experience. The team's lease ends in 2023, and any renovations will be done in hopes of extending that lease. The current lease between Gateway Sports and Entertainment Complex and the Indians require tax-paid dollars to cover renovations over $500,000, which includes new roofs, lights, and scoreboards. Nothing official has been announced yet, as many renovations were done in preperations for the 2019 MLB All-Star Game.

**NAMING RIGHTS:** When former owner Richard Jacobs bought the naming rights to the ballpark, which opened in 1994, he bought the naming rights for $13.9 million for twenty years (expiring in 2014). However, when Jacobs sold the Indians to Larry Dolan in 2000, Jacobs only retained naming rights through the 2006 season as part of the deal. The team had conversations with Jacobs about extending the deal due to Jacobs' expressed interest in keeping his family's name on the ballpark. The name of the ballpark remained Jacobs Field through the 2007 season. However, the stadium was renamed Progressive Field in 2008, when Progressive Corp. gained naming rights for $57.6 million. The Ohio-based insurance company entered into a sixteen-year naming-rights deal for approximately $3.6 million per year until 2023. This agreement also made the company the official auto insurer of the ball club. In 2017, the Indians announced that the Cleveland Clinic would be the presenting sponsor of Indians.com and the Indians Radio Network and will also partner up with four Cleveland Indians Community Impact programs.

## Team: Colorado Rockies

**Principal Owners:** Charles and Richard Monfort
**Year Established:** 1991 (First Game - 1993)
Team Website
Twitter: @Rockies

**Most Recent Purchase Price ($/Mil):** $95 (1992)
**Current Value ($/Mil):** $1.275 billion
**Percent Change From Last Year:** +4%

**Stadium:** Coors Field
**Date Built:** 1995
**Facility Cost ($/Mil):** $215
**Percentage of Stadium Publicly Financed:** 75%
**Facility Financing:** The legislature created the Denver Metropolitan Major League Baseball Stadium District in the six counties surrounding Denver. The District issued bonds and levied a one-tenth of 1% sales tax within the six-county area to fund the stadium. The tax will remain in place until the bonds are paid off in about ten years. The Rockies contributed $53 million.
Facility Website
Twitter: N/A

**UPDATE:** A surface parking area outside of the ballpark is being considered for a mixed-use development, including condos, hotels, dining, office, and retail space. There are many steps remaining in the ongoing planning process, including financing. The planning will require approval from the Denver City Council and around $32 million in new infrastructure. The area targeted for this new development is owned by the Denver Metropolitan Major League Baseball Stadium District, leased by the Rockies in a 99-year agreement, worth $125 million. That is in addition to a lease extension with Coors Field through the 2047 season.

**NAMING RIGHTS:** Coors Brewing Company (now MillerCoors) purchased the naming rights to the stadium prior to its completion in 1995. Coors Brewing reportedly paid a one-time $15 million lump sum for indefinite naming rights.

## Team: Detroit Tigers

**Principal Owner:** Ilitch Family
**Year Established:** 1901
Team Website
Twitter: @tigers

**Most Recent Purchase Price ($/Mil):** $82 (1992)
**Current Value ($/Mil):** $1.25 billion
**Percent Change From Last Year:** 0%

**Stadium:** Comerica Park
**Date Built:** 2000
**Facility Cost ($/Mil):** $300
**Percentage of Stadium Publicly Financed:** 38%
**Facility Financing:** Public financing paid for $115 million of the ballpark's cost through a 2% car rental tax, a 1% hotel tax, and money from Indian casino revenue. Tiger's owner Mike Ilitch paid the remaining $185 million.
Facility Website
Twitter: @ComericaPark

**UPDATE:** Major updates to the park are still being discussed for down the road, hinted at by President Chris Ilitch. It is believed that they may tie renovations into the downtown Detroit developments, including the Pistons' arena, Little Caesars Arena.

**NAMING RIGHTS:** Comerica Bank, a financial services company, purchased the naming rights for Comerica Park on December 21, 1998. Comerica will pay $66 million over thirty years. The average annual payout is $2.2 million, and the deal expires in 2030.

## Team: Houston Astros

**Principal Owner:** Jim Crane
**Year Established:** 1962
Team Website
Twitter: @astros

**Most Recent Purchase Price ($/Mil):** $465 (2011)
**Current Value ($/Mil):** $1.85 billion
**Percent Change From Last Year:** +4%

**Stadium:** Minute Maid Park
**Date Built:** 2000
**Facility Cost ($/Mil):** $252
**Percentage of Stadium Publicly Financed:** 68%
**Facility Financing:** Public financing of $180 million came from a 2% hotel tax and a 5% car rental tax. The Houston Sports Facility Partnership provided a $35 million interest-free loan with no repayment due until ten years of ballpark operations occurred. Astros owners contributed $52 million. The project was completed under budget, as only $248.2 million of $250 million in public money allotted for the project was used.
Facility Website
Twitter: N/A

**UPDATE:** The Astros and Minute Maid Park went under several renovations in the last year. The $25 million renovations include a club area exclusively for season ticket holders, and a staircase and dining and bars in right field. These renovations removed some seating for fans, but added standing room space, minimizing ticket losses. The Astros have announced more upgrades in the coming years, after the Astros signed a lease extension in 2018 that runs through 2050, leading to many ballpark renovations.

**NAMING RIGHTS:** On June 5, 2002, the Houston Astros agreed to a twenty-eight-year deal with Minute Maid, a division of Coca-Cola, worth $178 million. The Astros had to pay Enron $2.1 million to opt out of a thirty-year, $100 million agreement signed in 2000. The deal expands a long-term relationship with Minute Maid and Coca-Cola, who signed the deal in an effort to

compete with rival Tropicana, owned by PepsiCo. Tropicana currently owns the naming rights for the Tampa Bay Rays' stadium in Florida.

## Team: Kansas City Royals

**Principal Owner:** John Sherman
**Year Established:** 1969
Team Website
Twitter: @Royals

**Most Recent Purchase Price ($/Mil):** $1 billion (2019)
**Current Value ($/Mil):** $1.025 billion
**Percent Change From Last Year:** 0%

**Stadium:** Kauffman Stadium
**Date Built:** 1973
**Facility Cost ($/Mil):** $70
**Percentage of Stadium Publicly Financed:** 100%
**Facility Financing:** The stadium was financed through a $43 million county bond issue. Half of the bond money ($21.5 million) was used to fund the neighboring Arrowhead Stadium (NFL Kansas City Chiefs). The $256 million renovation of Kauffman Stadium was financed by a three eighth percent increase in the county sales tax.
Facility Website
Twitter: N/A

**UPDATE:** Upon the acquisition of the Royals, Sherman acknowledged a desire to move the team to a new stadium in downtown Kansas City, costing around $800 million or more. No plans are in place as of the 2020 season, but Sherman has reported he is open to ideas to new locations and possible funding.

**NAMING RIGHTS:** On July 2, 1993, Royals Stadium was renamed in honor of former owner Ewing M. Kauffman, who passed away on August 1, 1993. Kauffman, a self-made millionaire and beloved member of the Kansas City community, purchased the Royals as an expansion team in 1968 with the commitment of making the Royals a competitive team.

# Team: Los Angeles Angels of Anaheim

**Principal Owner:** Arturo Moreno
**Year Established:** 1961
Team Website
Twitter: @Angels

**Most Recent Purchase Price ($/Mil):** $183.5 (2003)
**Current Value ($/Mil):** $1.975 billion
**Percent Change From Last Year:** +4%

**Stadium:** Angel Stadium of Anaheim
**Date Built:** 1998
**Facility Cost ($/Mil):** $117
**Percentage of Stadium Publicly Financed:** 100%
**Facility Financing:** In April 1998, Disney completed a $117 million renovation. Disney contributed $87 million toward the project, while the City of Anaheim contributed $30 million through the retention of $10 million in external stadium advertising and $20 million in hotel taxes and reserve funds.
Facility Website
Twitter: @angelstadium

**UPDATE:** Experts say to keep eyes focused on the Angels and talks of big changes for the future. The team first opted out of their lease and then decided to renew for 2020. Due diligence is being conducted by the city of Anaheim and the Angels that may end in a long-term facility solution of a renovation or new stadium. A development group led by Moreno is working with the Angels and the city of Anaheim to map out a plan to redevelop the property, while the Angels remain in Anaheim through at least 2050. Officials in Long Beach have their eye on gaining the team as well with a waterfront stadium.

In addition to the possibility of a new stadium altogether, Moreno and his investment group (SRB Management Co.) proposed buying the ballpark site and developing around the area. Their plans include a new built-from-scratch neighborhood, converting parking lots and structures into an entertainment district. The development will begin upon closing of the property to SRB, which is expected in 2023. According to the management group, the economic impact will be monumental; over 45,000 jobs added and a $7 billion impact locally.

**NAMING RIGHTS:** In early 2004, Edison International exercised its option to terminate its twenty-year, $50 million naming rights agreement with the Anaheim Angels. Beginning with the 2004 season, the ballpark changed its name from Edison International Field of Anaheim to Angel Stadium of Anaheim. No decision on reselling the naming rights has been made.

## Team: Los Angeles Dodgers

**Principal Owner:** Guggenheim Baseball Management LLC
**Year Established:** 1883
Team Website
Twitter: @Dodgers

**Most Recent Purchase Price ($/Mil):** $2 billion (2012)
**Current Value ($/Mil):** $3.4 billion
**Percent Change From Last Year:** +3%

**Stadium:** Dodger Stadium
**Date Built:** 1962
**Facility Cost ($/Mil):** $18
**Percentage of Stadium Publicly Financed:** 0%
**Facility Financing:** The stadium was privately funded by then owner, Walter O'Malley.
Facility Website
Twitter: N/A

**UPDATE:** For the 2020 season, Dodger Stadium added new concession areas featuring benches and seating areas along with a few kids playing areas. On the outside of the stadium, a new $100 million centerfield plaza was added, including a new entrance, several food and beverage area, as well as space for live entertainment. A statue of Jackie Robinson was moved from the left-field reserve plaza to the new plaza, to be on prominent display.

Also added to the stadium were new elevators and bridges, a new sound system, and a new Sandy Koufax Statue. Many renovations were made in hopes of hosting the 2020 All-Star Game, however, that game has been canceled due to the Coronavirus pandemic.

**NAMING RIGHTS:** There is no current naming rights deal in place for Dodger Stadium.

## Team: Miami Marlins

**Principal Owner:** Bruce Sherman
**Year Established:** 1991 (First Game - 1993)
Team Website
Twitter: @Marlins

**Most Recent Purchase Price ($/Mil):** $1.2 billion (2017)
**Current Value ($/Mil):** $980
**Percent Change From Last Year:** -2%

**Stadium:** Marlins Park
**Date Built:** 2012

**Facility Cost ($/Mil):** $634
**Percentage of Stadium Publicly Financed:** 80.3%
**Facility Financing:** Miami-Dade County is responsible for a large percentage of the facility financing, contributing $376.3 million from tourist-related taxes, bond money, and road and utility repairs. The City of Miami agreed to pay $132.5 million in addition to covering the cost of land and demolition. The Marlins covered $155 million, plus any cost overruns, in addition to purchasing $100 million worth of parking from the City of Miami.
Facility Website
Twitter: @MarlinsPark

**UPDATE:** In 2020, the Marlins will be playing on a new turf in their home stadium. Changes to the turf will reduce environmental impact in terms of the irrigation of the field and the climatizing of the building. Due to the switch from natural grass to turf, the stadium has been able to host more entertainment events, including the Super Bowl Opening night on January $27^{th}$. Changes to the field also include moving in the outfield fences. Center field changed from 407 feet to 400 feet, bringing right-center from 399 feet to 387 feet. A sculpture that was removed from the outfield last season was placed outside the park, making the art on display for more to enjoy, including tour busses driving around the area.

**NAMING RIGHTS:** The Marlins do not currently have a contract in place for naming rights of Marlins Park. Marlins President David Samson said in January 2012 that the Marlins were seeking a naming rights partner, and until a deal is finalized, the facility will be known as Marlins Park.

## Team: Milwaukee Brewers

**Principal Owner:** Mark Attanasio
**Year Established:** 1969
Team Website
Twitter: @Brewers

**Most Recent Purchase Price ($/Mil):** $223 (2005)
**Current Value ($/Mil):** $1.2 billion
**Percent Change From Last Year:** +2%

**Stadium:** Miller Park
**Date Built:** 2001
**Facility Cost ($/Mil):** $400
**Percentage of Stadium Publicly Financed:** 77.5%
**Facility Financing:** The Brewers contributed $90 million for the stadium, while the public contributed $310 million through a five-county 0.10% sales tax increase. The $72 million infrastructure costs were split as follows: $18 million from the City, $18 million from Milwaukee County, and $36 million from the State.
Facility Website
Twitter: @millerpark

**UPDATE:** In 2020, Miller Park will debut Miller Lite Landing, a space that offers an additional three rows of seating with tables, a viewing deck, and flat screen tv's. There is also a seven-foot logo made of Miller Lite cans. The area known formally as the Miller Lite Deck is rebranded as the Leinie Lodge, while a Terrapin Beer Company bar is debuting as well. Changes to the ballpark and its name are possible with a new naming rights agreement with American Family Insurance that will begin in 2021.

**NAMING RIGHTS:** Miller Brewing Company purchased the naming rights to Miller Park for $41.2 million over twenty years. The deal has an average annual payout of $2.1 million and expires in 2020. American Family Insurance has acquired the naming rights when the agreement with Miller Brewing Company ends in 2020. The 15-year agreement will begin in the 2021 season. The stadium will now be named American Family Field.

## Team: Minnesota Twins

**Principal Owner:** James Pohlad
**Year Established:** 1961
Team Website
Twitter: @Twins

**Most Recent Purchase Price ($/Mil):** $44 (1984)
**Current Value ($/Mil):** $1.3 billion
**Percent Change From Last Year:** +8%

**Stadium:** Target Field
**Date Built:** 2010
**Estimated Facility Cost ($/Mil):** $555 (includes site acquisition and infrastructure)
**Percentage of Stadium Publicly Financed:** 64%
**Facility Financing:** The Twins contributed $152.4 million. Hennepin County contributed $350 million raised from bonds that will be financed through a 0.15% sales tax increase. The Twins themselves contributed $195 million. The remaining $10 million was split amongst Target Corporation, Minnesota Department of Transportation, and the Minnesota Ballpark Authority.
Facility Website
Twitter: N/A

**UPDATE:** For the 2020 season, the Twins extended the netting along the foul ball lines. The team adopted state-of-the-art netting, featuring knotless design and green coloring, blending in with the green field behind it. Also, renovations will be going into place in the next year to prepare for the 2021 NHL Winter Classic, hosting the Minnesota Wild and another team TBA.

**NAMING RIGHTS:** The Twins and Target Corp. reached a twenty-five-year marketing deal that includes the naming rights to the new ballpark. The deal is believed to cost $5–$8 million annually.

Target also holds the naming rights to the Target Center, home of the Minnesota Timberwolves. This is the first time that one company has had dual facility naming rights in a single city.

## Team: New York Mets

**Principal Owner:** Fred and Jeff Wilpon, Saul Katz
**Year Established:** 1962
Team Website
Twitter: @Mets

**Most Recent Purchase Price ($/Mil):** $391 (2002)
**Current Value ($/Mil):** $2.4 billion
**Percent Change From Last Year:** +4%

**Stadium:** Citi Field
**Date Built:** 2009
**Facility Cost ($/Mil):** $800
**Percentage of Stadium Publicly Financed:** 20.55% (not including savings gained through use of tax-exempt bonds)
**Facility Financing:** The Mets were responsible for Citi Field's construction costs. The Mets initially contributed $613 million from tax-exempt municipal bonds to pay for the construction, with another $82.3 million in tax-exempt bonds needed to complete construction. The use of tax-exempt bonds saved the Mets an estimated $513 million. An additional $89.7 million came from the City of New York, and $74.7 million came from the State of New York to cover infrastructure improvements, site preparation, installation of pilings, and mass transit improvements.
Facility Website
Twitter: @citifield

**UPDATE:** The Mets have added a self-checkout kiosk to Citi Field, using biometric tools to facilitate quick sales. This walk thru bar allows fans to select foods and beverages, and being on their way in seconds. With the ongoing pandemic, the Mets are also using cardboard cutouts of fans at Citi Field, to make players feel like they are not playing in an empty stadium.

**NAMING RIGHTS:** The Mets and Citigroup reached a twenty-year, $400 million naming rights and multifaceted strategic marking and business partnership. The annual payout is $20 million. The naming rights agreement has been under intense scrutiny in light of the $45 billion in government bailout money Citigroup took in 2008 and 2009. There was a failed attempt by a few members of Congress to dissolve the naming-rights agreement between the Mets and Citigroup.

## Team: New York Yankees

**Principal Owner:** Steinbrenner Family
**Year Established:** 1903
Team Website
Twitter: @Yankees

**Most Recent Purchase Price ($/Mil):** $8.8 (1973)
**Current Value ($/Mil):** $5 billion
**Percent Change From Last Year:** +9%

**Stadium:** Yankee Stadium
**Date Built:** 2009
**Facility Cost ($/Mil):** $1.6 billion
**Percentage of Stadium Publicly Financed:** 32%
**Facility Financing:** The Yankees contributed approximately $1.1 billion. The public contributed $480 million for parking facilities, park land, infrastructure improvements, and transportation improvements. The use of tax-exempt bonds will save the Yankees an estimated $786 million over forty years.
Facility Website
Twitter: @yankeestadium

**UPDATE:** With Coronavirus limiting the number of fans in the stands at MLB stadiums this year, Yankee Stadium is making efforts to give the season a more normal feel audibly. The Yankees are considering using crowd noise for the season, giving players a "sold out" feeling.

**NAMING RIGHTS:** The Yankees own the naming rights to the new Yankee Stadium and do not have any current plans to seek a corporate sponsor for the ballpark. The Yankees join the Cubs, Dodgers, Red Sox, and Royals in electing to not sign a naming rights deal and instead opt for corporate sponsorship of specific sections of the ballpark, such as club levels, restaurants, and viewing areas.

## Team: Oakland Athletics

**Principal Owner:** John Fisher
**Year Established:** 1901
Team Website
Twitter: @Athletics

**Most Recent Purchase Price ($/Mil):** $180 (2005)
**Current Value ($/Mil):** $1.1 billion
**Percent Change From Last Year:** 0%

**Stadium:** RingCentral Coliseum

**Date Built:** 1966
**Facility Cost ($/Mil):** $25.5
**Percentage of Stadium Publicly Financed:** 100%
**Facility Financing:** The cost of constructing the stadium was underwritten through a city bond issue. A $200 million renovation was completed in 1996.
Facility Website
Twitter: @RingCentralColli

**UPDATE:** Following the 2019 season, the Alameda County Board of Supervisors planned a sale of its half interest in the Coliseum site to the A's ownership for $85 million. The A's are proposing a large scale redevelopment of the Coliseum complex in the future, including a potential new ball park at the waterfront Howard Terminal site.

**NAMING RIGHTS:** In 2016, Overstock.com opted to drop out of the naming rights lease. Overstock had one more year in the lease. The naming rights for the Oakland Coliseum are now for sale for any company interested in buying the naming rights. The stadium was called the Coliseum until a new company bought the naming rights. On May 14, 2019, RingCentral placed a bid for a $1 million per year payment for the naming rights for three years. RingCentral gained approval from the Oakland-Alameda County Coliseum Authority on May 31, 2019. The facility will be renamed RingCentral Coliseum.

## Team: Philadelphia Phillies

**Principal Owners:** John Middleton, Buck Family
**Year Established:** 1883
Team Website
Twitter: @Phillies

**Most Recent Purchase Price ($/Mil):** $30 (1981)
**Current Value ($/Mil):** $2 billion
**Percent Change From Last Year:** +8%

**Stadium:** Citizens Bank Park
**Date Built:** 2004
**Facility Cost ($/Mil):** $458
**Percentage of Stadium Publicly Financed:** 50%
**Facility Financing:** Approximately half of the financing for Citizens Bank Park came from a combination of city and state funds. The State contributed a total of $170 million in grants to the Phillies and Eagles (NFL) for their new stadiums. The City of Philadelphia contributed $304 million total toward the construction of the two stadiums. This money is being collected through a two percent car rental tax. It is unclear how the city and state monies were divided between the two facilities.
Facility Website
Twitter: N/A

**UPDATE:** New this season at Citizen's Bank Park is a wide array of craft beers from local breweries. Sly Fox, one of the premier craft brewers in the Mid-Atlantic, brings three new beers from its selection to be added to the concession beer list. However, Yuengling has become the official lager of the Phillies, as the brewery and team announce a multiyear partnership. Also, following the 2019 season, the Phillies extended netting to better protect fans.

**NAMING RIGHTS:** On June 17, 2003, the Phillies entered into a naming rights agreement for its new stadium, Citizens Bank Park. The deal totals $95 million. Citizens Bank is paying $57.5 million over twenty-five years, or $2.3 million annually, to put its name on entrances, scoreboards, concourses, parking lot banners, and behind home plate. Citizens Bank is also paying the Phillies an additional $37.5 million for advertising during Phillies radio and television broadcasts.

## Team: Pittsburgh Pirates

**Principal Owner:** Nutting Family
**Year Established:** 1887
Team Website
Twitter: @Pirates

**Most Recent Purchase Price ($/Mil):** $92 (1996)
**Current Value ($/Mil):** $1.26 billion
**Percent Change From Last Year:** -1%

**Stadium:** PNC Park
**Date Built:** 2001
**Facility Cost ($/Mil):** $237
**Percentage of Stadium Publicly Financed:** 70%
**Facility Financing:** The Pirates contributed $40 million to the project. The remaining amount came from the State, County, and City as part of an $809 million sports facilities/convention center financing proposal that included Heinz Field for the Steelers (NFL).
Facility Website
Twitter: @PNCParkEvents

**UPDATE:** This past offseason, PNC Park received new seats in some sections. New chair backs were also installed, the first renovations to the seats since the 2001 opening of PNC Park.

**NAMING RIGHTS:** In August 1998, PNC Bank agreed to a twenty-year, $40 million deal for the naming rights to PNC Park. The deal ends in 2020 and averages an annual payout of $2 million. PNC Bank and the Pirates have been unable to reach a new deal toward a long-term extension.

## Team: San Diego Padres

**Principal Owner:** Ron Fowler, Peter Seidler
**Year Established:** 1969
Team Website
Twitter: @Padres

**Most Recent Purchase Price ($/Mil):** $600 (2012)
**Current Value ($/Mil):** $1.45 billion
**Percent Change From Last Year:** +7%

**Stadium:** PETCO Park
**Date Built:** 2004
**Facility Cost ($/Mil):** $456.8
**Percentage of Stadium Publicly Financed:** 66%
**Facility Financing:** The Padres contributed $153 million toward the construction of PETCO Park. The City contributed the remaining $303.8 million needed for the stadium. This money was raised through hotel taxes, $57.8 million from downtown development, $21 million from the Port of San Diego, and $225 million from municipal bonds. An additional $171.8 million was required for land acquisition and infrastructure.
Facility Website
Twitter: @PetcoPark

**UPDATE:** Many renovations were made for the 2018 season, but a few updates were left to be made to the facility for the new season.The Padres are pitching a residential and corporate project in the Tailgate Park next to Petco Park, costing nearly $1 billion.

**NAMING RIGHTS:** In January 2004, the San Diego Padres agreed to a twenty-two-year, $60 million naming-rights deal with San Diego-based PETCO. The annual payout through 2026 is $2.7 million.

## Team: San Francisco Giants

**Principal Owner:** Charles Johnson
**Year Established:** 1883
Team Website
**Twitter**: @SFGiants

**Most Recent Purchase Price ($/Mil):** $100 (1993)
**Current Value ($/Mil):** $3.1 billion
**Percent Change From Last Year:** +3%

**Stadium:** Oracle Park
**Date Built:** 2000

**Facility Cost ($/Mil):** $357
**Percentage of Stadium Publicly Financed:** 0%
**Facility Financing:** The stadium was financed using $172 million from a naming-rights deal and other sponsorships, a $170 million loan secured by the Giants, and $15 million in tax increment financing by the city's redevelopment agency. Selling concession rights and charter seats helped obtain additional financing.
Facility Website
Twitter: @OracleParkSF

**UPDATE:** In 2019, the Giants installed a new videoboard that is three times the size of the previous with a 4K display that offers twice the resolution. This marked the beginning of a $10 million project and a five-year capital improvement plan to be completed by 2024. The field itself is shrinking as the team is moving their bullpen from foul territory to behind the stadium's outfield wall. This will create terraces, allowing for new bleachers to be built. The stadium is building gates into the new outfield to allow pitchers to enter and exit the bullpen. Additionally, like other stadiums, netting is being extended from behind home plate all the way to the foul poles.

**NAMING RIGHTS:** Pacific Telesis purchased the naming rights to Pac Bell Park in 2000. The agreement extends over twenty-four years, paying the Giants $50 million at an average of $2.1 million annually. In December 2002, San Antonio based SBC Communications decided to retire its Pacific Bell trade names. Pacific Bell Park became SBC Park on January 1, 2004. Prior to the 2006 season, the name of the stadium was changed from SBC Park to AT&T Park. The change was the result of SBC Communications, Inc. purchasing AT&T and adopting the name AT&T, Inc. On January 9, 2019, AT&T gave the Giants an option of ending the naming contract one year early if the team were able to find a new partner quickly. Oracle Corporation rapidly made an agreement with the team. On January 10, temporary Oracle Park banners were installed to replace all AT&T Park signs.

## Team: Seattle Mariners

**Principal Owner:** John Stanton, Chris Larson
**Year Established:** 1977
Team Website
Twitter: @Mariners

**Most Recent Purchase Price ($/Mil):** $1.2 billion (2016) includes a 90% interest in the team. Nintendo of America will keep 10% interest in the team.
**Current Value ($/Mil):** $1.6 billion
**Percent Change From Last Year:** +2%

**Stadium:** T-Mobile Park
**Date Built:** 1999
**Facility Cost ($/Mil):** $517
**Percentage of Stadium Publicly Financed:** 72%

**Facility Financing:** The Mariners contributed $145 million, including $100 million in cost overruns toward the financing of the stadium. The public's share was capped at $372 million. Washington State's contribution was comprised of a 0.017% sales tax credit, proceeds from the sale of sports lottery scratch games ($3 million/year guaranteed), and proceeds from the sale of commemorative ballpark license plates. King County contributed funds via a 0.5% sales tax on food and beverages in King County restaurants, taverns, and bars, a 2% sales tax on rental car rates in King County, and a 5% admission tax on events at the new ballpark.
Facility Website
Twitter: @TMobilePark

**UPDATE:** A 10-year plan has started as the Mariners are investing $29.8 million in upgrades in just 2020, a plan that includes over $280 million overall. The 10-year plan includes on-going replacement of roof wheels, painting, plumbing and other basic infrastructure. Also, replacement of the ballpark's speaker system and ADA fan improvements cap off the infrastructure improvements.

**NAMING RIGHTS:** Safeco, an insurance company, bought the naming rights to Safeco Field in June 1998. The deal extends until 2019, paying an average of $2 million annually for a total of $40 million. In May 2008, Liberty Mutual acquired Safeco Corp., but Safeco Field's name did not change to reflect the new ownership. The agreement with Safeco ended after the company declined to extend the agreement beyond the 2018 season. T-Mobile purchased the naming rights on December 19, 2018, and the name of the facility changed to T-Mobile Park on January 1, 2019.

## Team: St. Louis Cardinals

**Principal Owner:** William DeWitt Jr.
**Year Established:** 1882
Team Website
Twitter: @Cardinals

**Most Recent Purchase Price ($/Mil):** $150 (1995)
**Current Value ($/Mil):** $2.2 billion
**Percent Change From Last Year:** +5%

**Stadium:** Busch Stadium
**Date Built:** 2006
**Facility Cost ($/Mil):** $365
**Percentage of Stadium Publicly Financed:** 12%
**Facility Financing:** The ballpark was primarily privately financed—$90.1 million from the Cardinals, $9.2 million in interest earned on the construction fund, and $200.5 million in bonds to be paid over a twenty-two-year period ($15.9 million per year) by the team. Public financing came from St. Louis County contributing $45 million through a long-term loan.
Facility Website
Twitter: N/A

**UPDATE:** For 2020, the Cardinals made notable renovations to Busch Stadium, overhauling 21 Party Suites along the right field line in a multi-million dollar project. Each suite was inspired by the Premium Party suites, introduced in 2019. They all include full service bars and personal bartenders, accommodating groups of 32 or more people.

**NAMING RIGHTS:** The St. Louis Cardinals entered into a twenty-year naming-rights deal that runs through the 2025 season with Anheuser-Busch to keep the same name as its previous stadium. Terms of the deal were not released.

## Team: Tampa Bay Rays

**Principal Owner:** Stuart Sternberg
**Year Established:** 1995 (First Game - 1998)
Team Website
Twitter: @RaysBaseball

**Most Recent Purchase Price ($/Mil):** $200 (2004)
**Current Value ($/Mil):** $1.05 billion
**Percent Change From Last Year:** +4%

**Stadium:** Tropicana Field
**Date Built:** 1990
**Facility Cost ($/Mil):** $138
**Percentage of Stadium Publicly Financed:** 100%
**Facility Financing:** The City of St. Petersburg issued general obligation bonds to fund construction. The bond debt is being partially serviced through a 1% increase in the countywide bed tax. A tourist development commission issued additional bonds of $62 million to renovate the stadium. The debt is serviced by a combination of bed tax revenues, stadium revenues, and city general fund monies. In addition, the team qualified for the state rebate program designed to attract new teams to Florida. A $85 million renovation project was completed in 1998, $14 million of which was funded by the Rays.
Facility Website
Twitter: N/A

**UPDATE:** The Rays expressed desires to explore a possible split-season between Tampa Bay and Montreal, but the team threatened to block future development on the Tropicana Field site as long as the current contract holds them to. The team received permission from the MLB to negotiate a deal with Tampa and Montreal. However, all of the plans have been halted for the 2020 season due to the Coronavirus pandemic and the shortened MLB season. The current Tropicana Field lease calls for the team to play all its home games there and prohibits the team from playing home games anywhere else.

**NAMING RIGHTS:** Tropicana Products, Inc., owned by PepsiCo, purchased the naming rights to the field in 1996 for $30 million, expiring in 2026. The deal nets the Rays roughly $1 million per season.

## Team: Texas Rangers

**Principal Owners:** Rangers Baseball Express (Ray Davis and Bob Simpson Co-Chairman)
**Year Established:** 1961
Team Website
Twitter: @Rangers

**Most Recent Purchase Price ($/Mil):** $593 (2010)
**Current Value ($/Mil):** $1.75 billion
**Percent Change From Last Year:** +6%

**Stadium:** Globe Life Field in Arlington
**Date Built:** 2020
**Facility Cost ($/Mil):** $1,200
**Percentage of Stadium Publicly Financed:** 71%
**Facility Financing:** Up to half of the over $1 billion cost of the stadium was covered by Arlington citizens and voters. SunTrust Banks also contributed $600 million worth of financing for the stadium, in addition to their financing of the Atlanta Braves and Falcons' stadium. Arlington officials refinanced $189.7 million in bonds that were issued by the city several years ago in order to pay for AT&T Stadium, and also issued new bonds to contribute to the new baseball field. The city is paying for its share of the stadium with a half-cent sales tax, 2% hotel occupancy tax, and 5% car rental tax.
Facility Website
Twitter: @RangersInfo

**UPDATE:** The 2020 season was to mark the first in the newly renovated Globe Life Field for the Rangers. Construction began in 2016 and finished amongst the Coronavirus pandemic in the spring of 2020. The field is made of artificial turf, and the roof is retractable. The Rangers cited that the reason for many vacancies in previous seasons being the weather, so they proposed a rough to limit the amount of weather caused absences. A new shopping mall and hotel are planned to be built along with the new stadium, creating a small entertainment district. The field will also be used for football and soccer games.

**NAMING RIGHTS:** The naming rights to the new stadium was to continue in Globe Life's possession, with a slight change from Globe Life Park to Globe Life Field. Globe Life signed a 25-year contract, worth $11 million annually, running through 2048. An old contract with Globe Life was canceled with four years remaining, in preparation for the new lease. Globe Life will also have its logo on top of the retractable roof, at all gate entrances, and part of the main outfield video board.

## Team: Toronto Blue Jays

**Principal Owner:** Rogers Communications, Inc.
**Year Established:** 1976 (First Game - 1977)
Team Website
Twitter: @BlueJays

**Most Recent Purchase Price ($/Mil):** $137 (2000)
**Current Value ($/Mil):** $1.625 billion
**Percent Change From Last Year:** +8%

**Stadium:** Rogers Centre
**Date Built:** 1989
**Facility Cost ($/Mil):** $570 (Canadian)
**Percentage of Stadium Publicly Financed:** 63%
**Facility Financing:** The local government paid $360 million, thirty corporations contributed $150 million, and the final $60 million came from luxury seat fees.
Facility Website
Twitter: @RogersCentre

**UPDATE:** Rumors have stirred about the possibility of a significant upgrade to Rogers Centre in the future, rather than the team moving to a new location. Toronto city officials are in preliminary talks with team ownership and Rogers Communication about that future.

**NAMING RIGHTS:** In November 2004, owner of the Toronto Blue Jays, Rogers Communications, purchased the Sky Dome from Sportsco International for $25 million and renamed it Rogers Centre.

## Team: Washington Nationals

**Principal Owner:** Lerner Family
**Year Established:** 1969
Team Website
Twitter: @Nationals

**Most Recent Purchase Price ($/Mil):** $450 (2006)
**Current Value ($/Mil):** $1.9 billion
**Percent Change From Last Year:** +9%

**Stadium:** Nationals Park
**Date Built:** 2008
**Facility Cost ($/Mil):** $611
**Percentage of Stadium Publicly Financed:** 100%

**Facility Financing:** The City of Washington, D.C. agreed to pay up to $610.8 million to finance the stadium with money generated by issuing bonds. Revenue to pay the debt is coming from in-stadium taxes on tickets, concessions, and merchandise (estimated at $11-$14 million annually), a new tax on businesses with gross receipts of $3 million or more (estimated at $21-$24 million annually), and $5.5 million in annual rent payments over a thirty-year lease term from the baseball team's owner. The Nationals are responsible for any cost overruns.
Facility Website
Twitter: N/A

**UPDATE:** After the Nationals' 2019 World Series victory, Nationals Park is developing an entertainment district around the stadium, a similar move to many other stadiums in the MLB. The 35,000 sq. foot district is attached to the stadium, partnered with Events D.C. (the city's District's convention and sports authority). This is being paid for by Event's D.C. ($3.65 million) with the Nationals to foot the remainder of the bill, while serving as the developer.

**NAMING RIGHTS:** The Nationals have decided to sell the naming rights for the stadium and are now looking for a company to buy the naming rights. The stadium is now entering its 12th season with no corporate naming-rights partner, but that could eventually change as more developments around the stadium are being completed.

# Exhibit E

BROOKINGS

Report

# Why the federal government should stop spending billions on private sports stadiums

Alexander K. Gold, Austin J. Drukker, and Ted Gayer Thursday, September 8, 2016

When the New York Yankees completed the new Yankee Stadium in 2009, the final construction bill was an estimated $2.5 billion. Of that, nearly $1.7 billion was financed by tax-exempt municipal bonds issued by the city of New York.

Because the interest earned on the municipal bonds is exempt from federal taxes, a large amount of tax revenue that would have been collected—had the bonds been issued as taxable—went toward the construction of the stadium. In other words, the Yankees received a federal subsidy to build their stadium. How much? About $431 million. That's a lot of money, but it gets worse.

The loss in federal tax revenues was even higher than the subsidy to the stadium. High-income taxpayers holding the bonds receive a windfall tax break, resulting in an even greater loss of revenue to the federal government. In the case of Yankee Stadium, the additional loss was $61 million. That is, the federal government subsidized the construction of Yankee Stadium to the tune of $431 million *federal* taxpayer dollars, and high-income bond holders received an additional $61 million.†

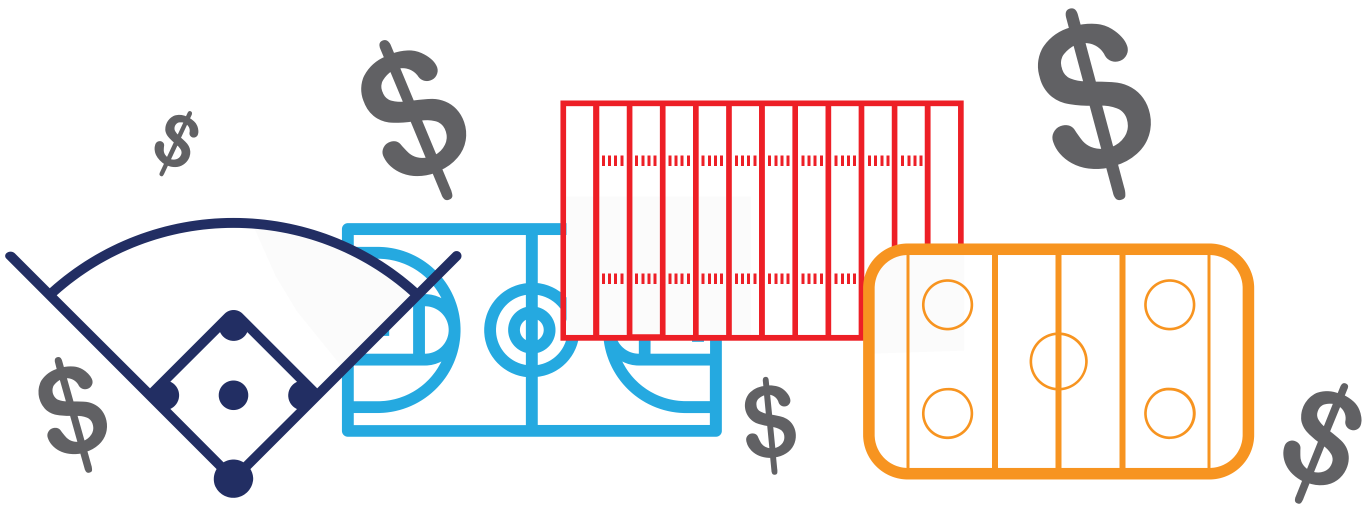
The Yankees, of course, aren't the only team to finance their stadium using tax-exempt municipal bonds. Since 2000, 35 other professional sports stadiums have also been financed with tax-exempt bonds.

In "Tax-exempt municipal bonds and the financing of professional sports stadiums," Brookings Senior Fellow Ted Gayer, Austin J. Drukker, and Alexander K. Gold quantify the *federal* subsidies given to finance professional sports stadiums built or majorly

renovated since 2000, and the total loss in federal tax revenue.

All together, the federal government has subsidized newly constructed or majorly renovated professional sports stadiums to the tune of $3.2 billion federal taxpayer dollars since 2000. But because high-income bond holders receive a windfall gain for holding municipal bonds, the resulting loss in total revenue to the federal government is even larger at $3.7 billion.

Use the interactive menu below to see how much of a federal subsidy each stadium built or majorly renovated since 2000 received, plus the total tax revenue lost.



## Federal financing of stadiums, by team

See the federal subsidy to and total revenue loss from each stadium built or majorly renovated since 2000*

**REVENUE LOSS** | **FEDERAL SUBSIDY**

| League | Team | Million |
|---|---|---|
| | New York Yankees | $492 |
| MLB | New York Mets | $214 |
| | Cincinnati Reds | $142 |
| | Miami Marlins | $132 |
| | Milwaukee Brewers | $117 |
| | Washington Nationals | $107 |

**$3.7B**
**TOTAL REVENUE LOST**

**MLB** 1.59B

| | | |
|---|---|---|
| | Minnesota Twins | $91 |
| | Houston Astros | $78 |
| | Philadelphia Phillies | $68 |
| | San Diego Padres | $68 |
| | Pittsburgh Pirates | $44 |
| | Detroit Tigers | $41 |
| | San Francisco Giants | $0 |
| | St. Louis Cardinals | $0 |
| NFL | Indianapolis Colts | $214 |
| | Chicago Bears | $205 |
| | Cincinnati Bengals | $182 |
| | Houston Texans | $147 |
| | Seattle Seahawks | $101 |
| | Arizona Cardinals | $94 |
| | Dallas Cowboys | $88 |
| | Philadelphia Eagles | $68 |
| | Minnesota Vikings | $65 |
| | Denver Broncos | $54 |
| | Pittsburgh Steelers | $44 |
| | Green Bay Packers | $35 |
| | Detroit Lions | $7 |
| | New England Patriots | $0 |
| | New York Giants** | $0 |
| | New York Jets** | $0 |
| | San Francisco 49ers | $0 |
| NBA | Brooklyn Nets** | $161 |
| | Houston Rockets | $112 |
| | Orlando Magic | $93 |
| | Memphis Grizzlies | $87 |
| | Charlotte Hornets | $65 |
| | Dallas Mavericks** | $44 |
| | San Antonio Spurs | $44 |
| | Miami Heat | $0 |
| | Oklahoma City Thunder | $0 |
| NHL | New York Islanders** | $161 |

| | |
|---|---|
| NFL | 1.29B |
| NBA | 504M |
| NHL | 300M |

| | |
|---|---|
| Pittsburgh Penguins | $65 |
| New Jersey Devils | $60 |
| Detroit Red Wings | $50 |
| Dallas Stars** | $44 |
| Arizona Coyotes | $23 |
| Columbus Blue Jackets | $0 |
| Minnesota Wild | $0 |

*Estimates calculated using a 3% discount rate. See full paper for estimates using different discount rates.

**Indicates a team that plays in stadium used by multiple leagues. The Brooklyn Nets and the New York Islanders both play at Barclays Center. The Dallas Mavericks and the Dallas Stars both play at American Airlines Center. In the table above, the full subsidy for each stadium is listed next to both teams that use the stadium. For the purposes of the graphic dividing the total subsidy ($3.2B) by league, the subsidy/revenue loss value for each stadium was divided in half, with half attributed to the NBA and half to the NHL. The New York Jets and the New York Giants both play at MetLife Stadium, though MetLife Stadium received no federal subsidies. See full paper for more on shared stadiums.

## Do stadiums benefit taxpayers and local economies?

With so much money at stake, it's worth asking: Should the federal government be spending money on these stadiums? Federal subsidies are justified for infrastructure projects that provide a public good across states, but local sports stadiums clearly do not meet this criterion.

Indeed, there is little evidence that stadiums provide even local economic benefits. Decades of academic studies consistently find no discernible positive relationship between sports facilities and local economic development, income growth, or job creation. And local benefits aside, there is clearly no economic justification for *federal* subsidies for sports stadiums. Residents of, say, Wyoming, Maine, or Alaska have nothing to gain from the Washington-area football team's decision to locate in Virginia, Maryland, or the District of Columbia.

So why is the federal government still subsidizing their construction?

## How Congress tried—and failed—to stop stadiums from receiving federal money

Until the early 1950s, most professional sports stadiums were privately built. That changed in 1953 when the Boston Braves were lured to Milwaukee by a new stadium built with public money. Since then, public funding of stadiums has been the norm.

In 1986, Congress tried to rein in this practice with the Tax Reform Act of 1986. But the reforms backfired, and instead encouraged state and local governments to offer generous financing packages in order for the financing to qualify for the federal subsidies.

**How to stop the federal cash flow to private sports stadiums**

Gayer, Drukker, and Gold argue that the most direct way to eliminate the practice of stadiums receiving federal money toward construction is for Congress to eliminate the "private payment test" for stadiums. By doing so, any stadium used primarily for "private business use" (that is, all professional sports stadiums) would no longer be eligible to receive federal tax-exempt financing.

An alternative approach would be to limit, rather than eliminate, the federal tax subsidy by mandating tax-exempt stadium bonds be deemed "qualified private activity bonds," which are subject to a statewide volume cap.

To learn more, download the full paper from Ted Gayer, Austin J. Drukker, and Alexander K. Gold.

You can also download the complete set of data on 45 stadiums built or renovated since 2000, 36 of which received federal subsidies.

† Download the paper for specifics on how the total revenue loss for each stadium is calculated. All figures are quoted in 2014 dollars. The $492 million in revenue loss attributable to Yankee Stadium is calculated using a discount rate of 3%.

# TAX-EXEMPT MUNICIPAL BONDS AND THE FINANCING OF PROFESSIONAL SPORTS STADIUMS

Ted Gayer
Austin J. Drukker
Alexander K. Gold

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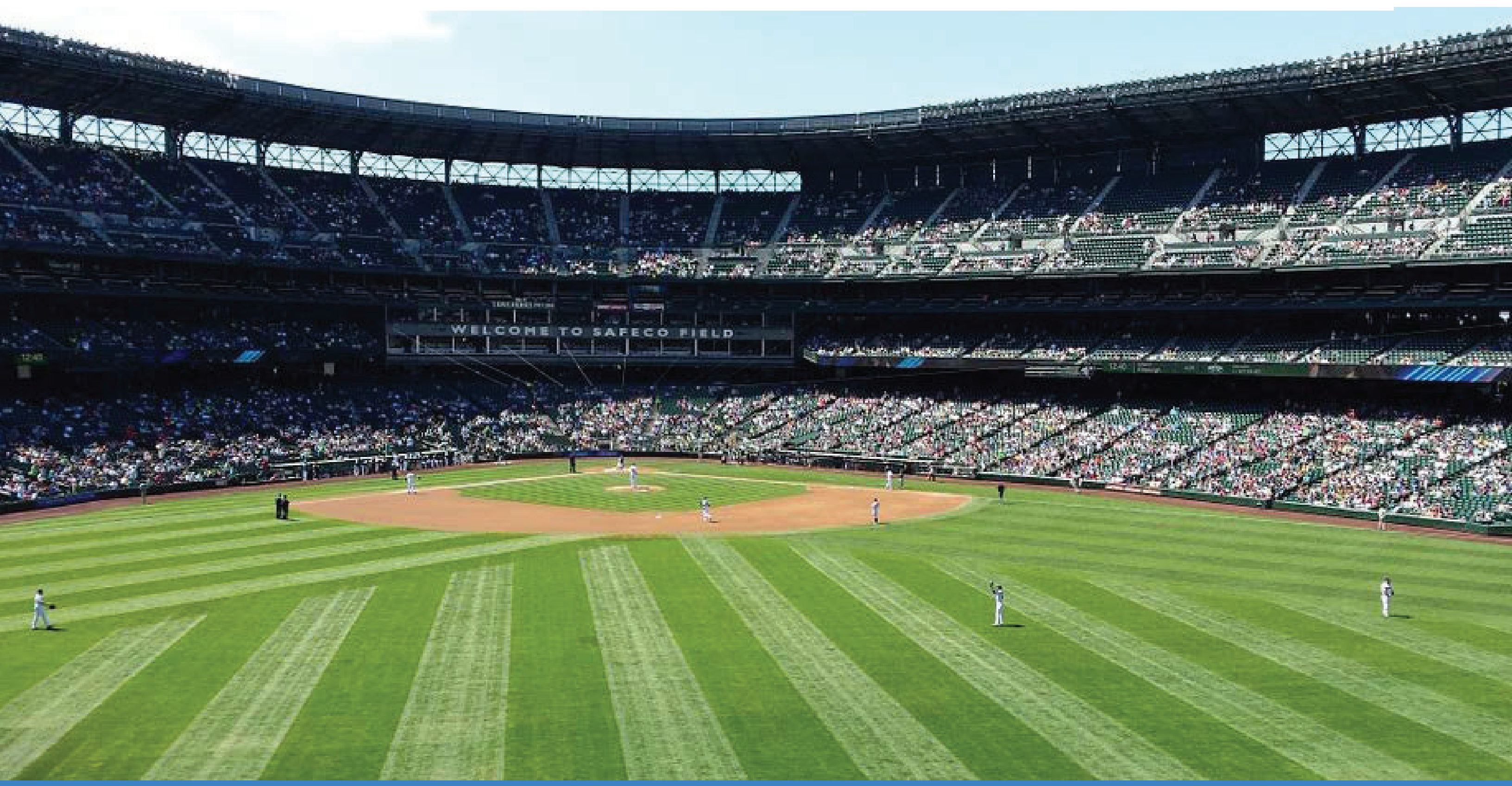


September 2016

Economic Studies
at BROOKINGS

# Introduction

Infrastructure significantly contributes to the nation's prosperity by fostering the functioning of such things as transportation, telecommunications, water supply, waste disposal, schools, hospitals, and utilities. Throughout its history, the United States has grappled with determining the appropriate level of public versus private provision of infrastructure, and government funding for infrastructure has come from various jurisdictional levels, from the local to the state to the federal government.

Table 1 provides estimates of public and private spending in 2014 on different components of transportation and water infrastructure, which accounts for the bulk of federal spending on infrastructure (Congressional Budget Office, 2015; Bureau of Economic Analysis, 2015).[1] Of the roughly $428 billion spent on transportation and water infrastructure projects in the United States, $416 billion came from the public sector, with nearly a quarter of this public funding coming from the federal government. The federal government supports infrastructure investment by spending money directly and by making grants to state and local governments for their capital spending. As also shown in Table 1, about 70 percent of all federal spending on infrastructure is in the form of direct grants and loan subsidies to state and local governments. In addition, the federal government makes significant indirect contributions to infrastructure investment through tax expenditures, which subsidize the borrowing costs of state and local governments, as well as some private entities for qualified activities, to finance certain projects.

This paper begins with a brief overview of the economic justifications for public funding for infrastructure and the optimal share of federal support for infrastructure projects. The particular focus is on the role of federal tax subsidies in the form of preferences granted for bonds that state and local governments issue to finance capital spending on infrastructure. The bulk of the paper examines federal tax expenditures to support a particular type of infrastructure project—sports facilities, which we generally refer to as stadiums. As will be made clear below, the justifications for public funding for stadiums are weak, and the justifications for federal government subsidies are even weaker because to the extent the projects confer any benefits, those benefits are local not national. In addition, relying on tax expenditures to provide these federal subsidies is particularly inefficient.

Indeed, as will be discussed below, in the Tax Reform Act of 1986 (TRA86), Congress attempted to do away with the federal tax subsidy for stadiums, but instead unwittingly provided an incentive for a federal government match for local government subsidies for stadiums. Another unintended consequence of TRA86 was that it provided a disincentive for local governments to finance their subsidies to stadiums with taxes

1 Energy and telecommunications infrastructure is provided primarily by private sector firms, and school facilities and equipment are provided largely by state and local governments. See Congressional Budget Office (2008) for information on spending for other types of infrastructure.



that largely fall on those receiving the benefits of the stadium. For example, in order for a stadium to qualify for the federal tax expenditure, the local government cannot finance the bond by levying a tax on ticket purchases at the stadium. In other words, it cannot directly tax the very users of that benefit.

We examine the size of the subsidy and the federal tax expenditure for all professional sports stadiums newly constructed, majorly renovated, or currently under construction in the United States since the year 2000 for the four largest American sports leagues: Major League Baseball (MLB), the National Football League (NFL), the National Basketball Association (NBA), and the National Hockey League (NHL). Of the 45 stadiums that fit this description, 36 of them were funded, at least in part, with federal tax expenditures in the form of tax-exempt municipal bonds. We estimate that the total tax-exempt bond principal issued to fund these stadiums was approximately $13.0 billion,[2] the present value subsidy to the bond issuers was $3.2 billion (assuming a 3 percent discount rate) or $2.6 billion (assuming a 5 percent discount rate), and the present value federal tax revenue loss was $3.7 billion (3 percent discount rate) or $3.0 billion (5 percent discount rate), with all terms in 2014 dollars. We conclude the paper with suggested reforms to reduce or eliminate this inefficient subsidy for local sports stadiums.

### WHAT SHARE OF INFRASTRUCTURE SHOULD GOVERNMENT FUND AND WHICH JURISDICTIONAL LEVEL SHOULD FUND IT?

Generally, public provision of infrastructure is justified if the private sector would fail to provide socially desirable amounts of it—that is, services whose social benefits exceed social costs, but which are privately unprofitable. There are two general reasons why this might occur. The first is that some infrastructure could be considered a public good, meaning that it is nonrival and nonexcludable in consumption. A nonrival good is one for which, once it is provided, the additional resource cost of another person consuming it is zero. A nonexcludable good is one in which it is expensive or impossible to prevent anyone from consuming it. A private market will tend to underprovide a public good since each person has an incentive to free-ride by letting others purchase the good while still enjoying the benefits once it is provided. In other words, a private entity providing a public good is unable to charge all the users a fee based on the benefits they receive. To the extent that infrastructure provides public benefits and the recipients of these benefits cannot be charged for its use, there is a justification for government supplying the infrastructure and recouping the costs through taxation. This assumes that the government is able to discern how much individuals value infrastructure and act upon this information appropriately.

Public provision or economic regulation of infrastructure might also be justified when the activity is subject to continually decreasing average costs, which means that the greater the level of output, the lower the cost per unit. This can occur when there are high up-front costs to build and low marginal costs to operate and maintain. Under such circumstances—referred to as a natural monopoly—a single firm can take advantage of the economies of scale and supply the entire industry output (Winston, 2013). Examples include bridges, water systems, electricity,

2 This calculation includes the costs of ancillary structures, such as parking facilities and infrastructure improvements.

telecommunications, and cable television. A private firm in such a position would likely have monopoly power, and use it to maximize profits by restricting supply and raising prices, which would lead to an underprovision of the good or service. Such infrastructure projects might justify government ownership or at least government oversight in order to maintain the efficient level of providing the good or service.

The degree to which an infrastructure project is likely to be underprovided by private firms suggests the degree of responsibility the government should take in providing the project. This analytical framework also suggests the conceptual basis for determining the appropriate division among federal, state, and local funding of infrastructure. To the extent that the economies of scale or the public benefits cross jurisdictional borders, there is a justification for the larger jurisdiction in which the benefits fall to subsidize the subjurisdiction considering the infrastructure project.

In this context, it is important to note that one possible role for the federal government is to provide incentives to state governments to provide more of the public good than is optimal from the state's perspective. This can be achieved through intergovernmental grants (Gramlich, 1990). The optimal intergovernmental matching grant to the state would lower the price of providing the public good enough to induce the state to invest the efficient amount, accounting for the benefits to the entire nation. Of course, determining the correct level of a matching grant is a difficult task, and too large a subsidy would lead to too much of the public good being provided, meaning a state or local government free-riding off of federal tax revenue.

As shown in Table 1, the federal government currently subsidizes infrastructure through direct expenditures and through grants and loan subsidies. Direct expenditures include such things as spending on the construction of dams by the Army Corps of Engineers or the Bureau of Reclamation, and grants and loan subsidies are primarily provided to the state and local governments to support transportation projects (Congressional Budget Office and Joint Committee on Taxation, 2009). Although state and local governments rely primarily on their own revenues to purchase capital, federal grants are also an important source of funds (Congressional Budget Office, 2013).

The federal government also subsidizes infrastructure investment through tax expenditures, which are subsidies provided through the tax code. The largest federal government subsidy to support infrastructure is the tax exemption for interest earned on bonds issued by state and local governments—known as municipal bonds—to finance government operations and certain qualified private sector activities. The Joint Committee on Taxation (2015, p. 40) estimates that the tax exemption for public-purpose state and local government bonds will amount to $187.7 billion in lost federal tax revenue between 2015 and 2019. As discussed below, the savings afforded to state and local governments is smaller than the lost federal tax revenue.

The extensive use of the tax code to subsidize infrastructure has two budgetary implications. First,



the lost tax revenue from the tax-exempt bonds is not part of the computation of federal spending and therefore is not taken into account in the federal budget. This reduces the transparency of federal allocation of resources to these projects. Second, and relatedly, the federal government's control over the tax subsidy is limited because the amount of the tax expenditure is not decided through the annual appropriations process. It is, in effect, a form of entitlement spending whose amount is largely determined by circumstances outside of the control of the federal government (Congressional Budget Office and Joint Committee on Taxation, 2009). Also, as will be discussed later, the use of tax-exempt bonds is an inefficient form of subsidy, since the loss of federal tax revenue exceeds the reduction in the interest costs of the bond issuers.

## SHOULD LOCAL, STATE, OR FEDERAL GOVERNMENTS SUBSIDIZE SPORTS STADIUMS?

The remaining focus of this paper is on government subsidies for stadiums for the four major professional sports leagues in the United States. Sports stadiums do not exhibit economies of scale, so there is no natural monopoly justification for government subsidies. Instead, the justification often given for government subsidies for such stadiums—particularly local subsidies—is that there are spillover gains to the local economy from a stadium that are greater than the cost of the subsidies to local taxpayers (Josza, 2003).

The evidence for large spillover gains from stadiums to the local economy is weak. Academic studies consistently find no discernible positive relationship between sports facility construction and local economic development, income growth, or job creation (Baim, 1994; Rosentraub et al., 1994; Baade, 1996; Zimmerman, 1996; Noll and Zimbalist, 1997; Coates and Humphreys, 1999, 2008; Siegfried and Zimbalist, 2000; Josza, 2003). Indeed, after 20 years of academic research on the topic, "Articles published in peer reviewed economics journals contain almost no evidence that professional sports franchises and facilities have a measurable economic impact on the economy" (Coates and Humphreys, 2008, p. 302). And as Siegfried and Zimbalist (2000, p. 103) put it, "Few fields of empirical economic research offer virtual unanimity of findings … that there is no statistically significant positive correlation between sports facility construction and economic development."

This finding should not be surprising, given that team revenues typically constitute a small share of a city's economic output and teams do not employ a substantial number of people. In addition, given that most consumers have a relatively inflexible leisure budget, any economic activity generated while attending a game will largely if not entirely be offset by reduced spending on other local leisure activities. Baade and Sanderson (1997), for instance, observed a reordering of leisure expenditures within cities that acquired new sports teams, but there was no evidence that the new teams brought output or employment growth to the local area.

A more plausible justification for local subsidies for sports stadiums is that there are public good benefits to local residents who never attend the games, in the form of enjoyment from following

the team, watching the games on TV (above and beyond the benefits of watching the other cities' teams play), and talking to fellow local fans of the team. Relatedly, some residents might find value in living in a place considered a "major league" city. These benefits are difficult to estimate, and it is questionable whether they meaningfully exist at all (Siegfried and Zimbalist, 2000).

Even if one believes, contrary to the empirical evidence, that the spillover benefits to the local economy justify taxpayer support, or that the benefits to local residents of following and talking about the home team are substantial, there still remains no economic justification for federal subsidies for sports stadiums. Residents of, say, Wyoming, Maine, or Alaska, gain nothing from the Washington-area football team's decision to locate in Virginia, Maryland, or the District of Columbia. Yet, under current federal law, taxpayers throughout the country could ultimately subsidize the stadium, wherever it is located. In the next section, we discuss how this subsidy came into existence, followed by our estimates of the size of the subsidy and the loss of federal revenue stemming from this subsidy.

## THE HISTORY OF FEDERAL SUBSIDIES FOR SPORTS STADIUMS

The federal tax exclusion for interest earned on state and local bonds began with the first modern U.S. income tax in 1913.The justification was that it would be unconstitutional for one level of government to levy taxes on the securities issued by another level of government, a view that was later rejected by the U.S. Supreme Court. The original income tax did not limit the purposes for which state and local governments could issue bonds—although some states were constrained in their uses by their own laws—leading to tax-exempt bonds being issued to finance a host of private activities.

For the first half of the twentieth century, local professional sports franchises funded the construction of most stadiums (Noll and Zimbalist, 1997). With the exception of the Los Angeles Coliseum (built in 1923), Chicago's Soldier Field (built in 1923), and Cleveland's Municipal Stadium (built in 1931), which were all built with the intention of luring the Olympic Games, all major league facilities were constructed exclusively with private funds until 1953. In that year, the first team relocation in Major League Baseball since 1903 occurred when the Boston Braves became the Milwaukee Braves, lured by the new County Stadium, which was built with public funds. The move by the Braves ushered in an era of itinerant franchises (Siegfried and Zimbalist, 2000).

The Revenue and Expenditure Control Act of 1968 placed restrictions on the activities eligible for tax-exempt financing. It declared state and local bonds taxable if more than 25 percent of the bond proceeds was to be used by a nongovernmental entity and if more than 25 percent of the debt service was secured by property used directly or indirectly in a private business. The 1968 law did, however, exempt certain activities that exceeded these 25 percent thresholds, including the financing of sports stadiums (Zimmerman, 1996).



With the Tax Reform Act of 1986, Congress attempted to do away with the tax exemption for bonds financing sports stadiums by eliminating it from the category of private activity bonds exempt from federal taxation. TRA86 categorized a bond as private if it met two conditions: (i) more than 10 percent of the bond proceeds were to be used by a nongovernmental entity, and (ii) more than 10 percent of the debt service was secured by property used directly or indirectly in a private business. The first condition is known as the "private business use test," and the second condition is known as the "private payment test." While there remained a list of private activities specifically exempt from federal taxation, stadiums were excluded from that list. TRA86 also capped the total volume of such exempt bonds that could be issued by a state to the greater of $50 per resident or $150 million.[3]

Under the prevailing law of TRA86, a stadium bond can remain exempt from federal taxation if it violates either the private business use test or the private payment test. Stadium bonds will undoubtedly pass the private business use test, since professional sports teams will almost always consume more than 10 percent of a stadium's useful services. Therefore, in order to be eligible for federal tax exemption, a stadium bond issue must be structured so that no more than 10 percent of its debt service is secured by the property used directly or indirectly by the sports franchise. This sets up a kind of matching incentive, an "artificial financing structure" (U.S. Department of the Treasury, 2015, p. 85), whereby federal tax exemption is granted if the state or local government is willing to finance at least 90 percent of the debt service for the bonds. Additionally, since this 90 percent of financing cannot come even indirectly from private activity if tax exemption is to be maintained, the state and local government cannot rely on stadium-generated revenue, such as a tax on entry tickets to the stadium or event, or even rent collected from the team as tenants.

TRA86 effectively requires that, in order to receive the federal subsidy, a state or local government must finance the bulk of the stadium, and it must rely on tax revenue unrelated to the stadium for the financing, such as general sales taxes, property taxes, income taxes, lotteries, or taxes on alcohol and cigarettes. The most common type of tax imposed to finance sports stadiums is known as a "tourist tax," which is a tax levied on hotel stays and rental cars; this is a particularly attractive option for local authorities because they can advertise to the public that the tax burden will fall primarily on nonresidents. In addition to the inefficiencies of federal subsidies for stadiums described earlier, this prohibition on using even indirect stadium revenue to finance the bonds violates a common criterion of fairness, known as the "benefits-received principle." This principle holds that a publicly provided good or service should be paid for by people in proportion to the benefits they receive from the good or service.[4]

3 Adjusted for inflation, the volume cap for calendar year 2015 is set at the greater of $100 per resident, or $301,515,000 (Internal Revenue Service, 2015).

4 In 2006, after New York taxpayers indicated a reluctance to fund new stadiums for the Yankees and Mets using general tax revenue, the Internal Revenue Service issued two private letter rulings allowing stadium-related tax revenue to be classified as "payments in lieu of taxes" (PILOTs), which could be used to pay the debt service on governmental debt (Internal Revenue Service 2006a, 2006b). These rulings had the advantage of making the financing of these New York stadiums more consistent with the benefits-received principle, but they had the disadvantage of reducing local taxpayer resistance to federally subsidized public financing of stadiums (Zimmerman, 2008). In 2009, PILOT bonds were used to fund a third New York stadium, the Barclays Center.

Absent the subsidies from all levels of government, there would be little incentive for the teams or private investors to finance so many new (and increasingly luxurious) stadiums. However, in addition to the federal tax incentive, professional sports teams have considerable negotiating power with the state and local governments, since the four major professional sports leagues control both the movement of their franchises and the total number of franchises in the leagues, resulting in demand for major sports franchises that exceeds the existing supply. The leagues in effect have monopoly power over the placement and number of major sports teams, and therefore have a strategic incentive to expand the number of teams fast enough to deter the formation of rival leagues, yet slow enough to ensure that threats by existing franchises to relocate are taken seriously (Siegfried and Zimbalist, 2000). This enables them to extract subsidies from the state and local governments that otherwise would not occur.

## ESTIMATING THE SUBSIDY AND LOSS IN TAX REVENUE

The federal tax exemption for interest income from municipal bonds enables issuers of such debt to sell bonds that pay lower rates of interest than do taxable bonds, since investors are willing to accept a lower before-tax rate of return than they would receive on taxable bonds. Suppose a bond investor faces an income tax rate of 35 percent on additional income, and the rate of return on taxable bonds is 15 percent. Then, as long as the rate of return on a comparable tax-exempt municipal bond exceeds 9.75 percent, the investor prefers this option to the taxable bond option.[5] More generally, if $\tau$ is an individual's marginal tax rate and $r_c$ is the rate of return on taxable bonds, the investor is willing to purchase nontaxable bonds as long as his return exceeds $(1 - \tau)r_c$. Hence, the issuers can borrow funds at rates lower than those prevailing on the market, providing them with a subsidy from the federal government.

The total value of this federal subsidy to the borrowers is computed simply by multiplying the interest savings (the spread between the interest rate of a taxable bond and the interest rate of the tax-exempt bond of similar characteristics) by the bond principal in a given year, summed across the term of the bond (Galper and Toder, 1981; Zimmerman, 1991, 1997; Joint Committee on Taxation, 2008, 2012a, 2012b, 2013). More precisely, for any tax-exempt bond of term length $n$ and principal value $b$ (adjusted to 2014 dollars), with $t$ designating the year since the issuance of the bond and $r_c - r_m$ denoting the interest rate spread between taxable corporate and nontaxable municipal bonds, we compute

$$(1) \qquad \textit{Undiscounted Value of Subsidy} = \sum_{t=1}^{n} b(r_c - r_m).$$

We then compute the present value of the subsidy, using discount rates (designated as $\rho$) of 3 and 5 percent, as

5 This assessment assumes that the taxable and nontaxable bonds are comparable with respect to characteristics such as risk, time to maturity, and other factors.



$$(2) \qquad \textit{Present Value of Subsidy} = \sum_{t=1} \frac{b(r_c - r_m)}{(1+\rho)^t}.$$

Note that these subsidy estimates are computed for the time that the bond is issued with the designated maturity date at the time of issuance. Many tax-exempt bonds are refunded sometime after issuance, wherein the original bonds are recalled and reissued at a lower interest rate. Because of the difficulty of determining whether each bond has been refunded, we elect to only include the initial issuances reflecting the issuance's maturity date. Conceptually, it is ambiguous whether subsidy estimates based on refunded and reissued bonds would lead to higher or lower subsidy estimates, since it is the spread between the taxable and nontaxable interest rates that determines the size of the subsidy, not the level of the interest rate for the nontaxable bond, which presumably decreases between initial issuance and reissuance. Also note that the subsidy computation above assumes that the loan is not amortized, meaning the full principal is paid off at the end of the bond's term (which is common practice for the bonds we examine).

The equations above yield estimates of the subsidy value to the issuer of the tax-exempt bond, but because tax-exempt bonds are an inefficient way to provide a subsidy, the total revenue loss to the federal government exceeds the value of the subsidy to the issuers. To see this, assume there are two taxpaying investors, one who faces a 35 percent marginal tax rate and another who faces a 25 percent marginal tax rate. If the market rate of return on taxable bonds is 15 percent, the after-tax return for the first investor is 9.75 percent and for the second is 11.25 percent. To induce both of them to buy the tax-exempt bond rather than the comparable taxable bond, the net rate of return must therefore be at least 11.25 percent, which is called the "market-clearing return." If the market-clearing return is 11.25 percent, some of the federal tax subsidy is wasted on the first investor who would have been willing to buy the bond at any yield greater than 9.75 percent.

In order to compute the net loss in federal tax revenues, suppose that the borrower issues \$100 in bonds at the interest rate of 11.25 percent to the investor who faces an income tax rate of 25 percent. Since the interest rate on the taxable bond is 15 percent, the borrower saves \$3.75 from the tax exemption and the federal government loses \$3.75 in tax revenue. But now assume the borrower issues \$100 in bonds at the interest of 11.25 percent to the investor who faces an income tax rate of 35 percent. The borrower still saves \$3.75 from the tax exemption, but the federal government loses \$5.25 in tax revenues. Thus, \$1.50 of the tax break is not translated into a gain for the borrower, and is instead a windfall gain to the taxpayer in the higher tax bracket, reflecting an efficiency loss of the tax exemption. While all holders of tax-exempt debt benefit, tax exemption provides a larger benefit to high-income taxpayers (Galper et al., 2013).

This efficiency loss is captured by comparing the tax rate that clears the municipal market ($\tau^*$) to the average tax rate of the municipal bond holders ($\overline{\tau}$). The federal revenue loss is then computed by dividing the undiscounted and discounted values of the subsidy (equations 1 and 2) by the ratio of the market-clearing tax rate to the average tax rate of municipal bond holders ($\tau^*/\overline{\tau}$).[6] Following

6 Note that the estimates of revenue loss assume that current holders of tax-exempt bonds would replace their holdings of these bonds with taxable bonds rather than other tax-preferred assets if the tax exemption were eliminated (Poterba and Ramírez Verdugo, 2011).

Zimmerman (1991), we compute $\overline{\tau}$ as the average household and corporate tax rates weighted by household and corporate shares of municipal debt. Poterba and Ramírez Verdugo (2011, Table 5) use the 2004 Survey of Consumer Finances to estimate the shares of municipal debt held by various tax brackets; based on their estimates, we compute the average household marginal tax rate for municipal bond holders to be about 26 percent.[7] The corporate tax rate is 35 percent. We calculate the household and corporate shares of municipal bond holdings based on Table L.212 of the Financial Accounts of the United States (Board of Governors of the Federal Reserve System, 2016, p. 112).[8] The household share ranges from 0.58 (in 1996) to 0.76 (in 2004).

## ESTIMATING THE INTEREST RATE SPREAD

The estimates of the undiscounted and present value subsidies to the issuers of the tax-exempt bonds rely on an estimate of the interest rate spread at the time that the tax-exempt bond is issued. The precision of the subsidy and revenue loss estimates therefore rely heavily on the assumption that the characteristics of the tax-exempt bond are comparable to the characteristics of the taxable bond along all dimensions except for whether the interest earned is subject to the income tax. In other words, the appropriate computation of the interest rate spread would compare taxable and nontaxable bond rates that have the same structure (e.g., fixed versus variable), term, credit risk, and liquidity.

Historically, Treasury bonds were considered the taxable alternative to municipal bonds (Poterba, 1986; Heaton, 1986; Mankiw and Poterba, 1996), since both were considered close to riskless. More recent studies have assumed high-grade corporate bonds as the taxable alternative to municipal bonds (Joint Committee on Taxation, 2008, 2012a, 2012b, 2013; Congressional Budget Office and Joint Committee on Taxation, 2009). The Congressional Budget Office and Joint Committee on Taxation (2009) note that although municipal bonds and corporate bonds may vary somewhat in terms of risk, time to maturity, fixed versus variable interest payments, and other bond-specific factors, several potential sources of bias likely offset each other to a large degree.

We follow the more recent literature and use corporate bonds, rather than Treasury bonds, as our taxable alternative to tax-exempt municipal bonds. For each tax-exempt bond issued to finance a stadium, we use the average interest rate for high-grade municipal bonds at the year of issuance in our computation of the spread, rather than rely on the interest rate for the specific tax-exempt stadium bond. We do this because the individual tax-exempt stadium bond is determined by a host of characteristics that make it challenging to control for in a comparison with taxable bonds. Following Zimmerman (1991), we use average yields for 20-year municipal bonds rated Aa by Moody's Investors Service, and for the comparable taxable bonds we use average yields for

7 Evidence from the Survey of Consumer Finances suggests that the average household marginal tax rate for municipal bond holders has stayed roughly constant post-TRA86. Based on the nine Surveys of Consumer Finances conducted between 1989 and 2013, Bergstresser and Cohen (2016, Table 12) calculate that the marginal tax rate of the median household holding municipal debt has been roughly constant at 28 percent since 1989. Zimmerman (1991, p. 110) also uses 28 percent in his calculations.

8 We define corporate holdings of municipal securities to be the sum of assets held by (i) nonfinancial corporate businesses (line 8), (ii) U.S.-chartered depository institutions (line 12), (iii) property-casualty insurance companies (line 16), and (iv) life insurance companies. Household holdings of municipal securities are defined as the sum of assets held by (i) the household sector (line 8) and (ii) nonfinancial noncorporate businesses (line 10).



seasoned corporate bonds rated Aa by Moody's.[9]

By computing averages of the two broadly similar categories of bonds, the goal is to capture similarities across the groups in terms of risk, liquidity, maturity, fixed versus variable payments, and other characteristics. If, for example, the tax-exempt bonds are considered higher risk or less liquid than the high-grade corporate bonds, then their yields will include a premium that would lead to an underestimate of the interest rate spread used in the calculations.

Figure 1 shows the interest rate spread between Moody's Aa-rated corporate bond yields and Moody's Aa-rated municipal bond yields from 1996 through 2014.[10] Note that the interest rate spread trends down throughout our period of evaluation. This suggests that subsidy estimates based on refunded and reissued bonds would be lower than our estimates, which are based on the spread at the time of the bond issuance. Similarly, adjusting the subsidy estimates to account for tax-exempt variable rate bonds (which periodically adjust interest rates) would also yield lower estimates. Whether this decrease in spreads over time represents a reduction in the subsidy value (e.g., a change in expected future tax rates or a market-driven change in the volume of tax-exempt bond issuance) or a change in the relative characteristics (e.g., a change in the relative perceived default risk) of the different bond categories is unclear.[11]

## PRINCIPAL VALUE AND TERM LENGTH

A municipal bond issuance used to finance a stadium typically consists of a number of individual bonds, each structured in a particular way. They frequently combine three types of bonds: serial bonds, term bonds, and capital appreciation bonds. Serial bonds consist of smaller units that mature gradually over a number of years. Term bonds are single bonds that come due all at once, often with an optional or mandatory early call feature that allows the issuer to purchase bonds off the market at either par value or the current market price, whichever is lower. Many of the term bonds used to finance stadiums use a mandatory sinking reserve fund, where the municipality makes deposits (often annually) into an account that is either held in escrow until the maturity date or immediately used to call some of the bonds.

Capital appreciation bonds are less common than the other two, featured in only 11 stadiums in our data set. For these bonds, the investment return on the initial principal is reinvested at a stated compound rate until maturity. Investors receive a single payment at maturity representing both the principal and the total investment return. Municipalities sometimes prefer capital appreciation bonds because reinvesting of the interest return means that only the original principal amount counts against any debt limit the municipality might have (rather than the much larger par value).

9 As we will show later, our results are fairly robust across alternative measures of bond yields.

10 Our interest rate spread calculation starts in 1996, since Miller Park, which completed construction in 2001, began issuing bonds in 1996. A few other stadiums, including American Airlines Center, CenturyLink Field, Comerica Park, Heinz Field, Minute Maid Park, Paul Brown Stadium, PNC Park, and Sports Authority Field also began issuing bonds prior to 2000.

11 See, for example, Poterba and Ramírez Verdugo (2011) and Joint Committee on Taxation (2013), for possible explanations of the declining yield spread. Mankiw and Poterba (1996) consider a model in which tax-exempt investors hold only taxable bonds and equities, while taxable investors hold only tax-exempt bonds and equities. The model predicts that the yield spread between taxable and tax-exempt bonds should be an increasing function of the dividend yield on corporate stocks.

To take just one typical example, FedExForum—home of the NBA's Memphis Grizzlies—which was constructed in 2004, was financed by three separate bond issuances made in 2002. These bond issuances totaled $225 million in financing. They were split into five series, labelled A through E, with A and B appearing in one issuance, C in the second, and D and E in the third. Table 2 shows the value of the five different series (in nominal 2002 dollars, as well as the inflation-adjusted value we use in our computations), and the different types of bonds within each series.

Series A of this bond issuance, which combines both serial and term bonds, is representative of the type of financing frequently used for stadiums. The serial bonds in this issuance mature every year between 2004 and 2023, with the principal amounts increasing over time. As is common, these serial bonds are followed by larger term bonds, which are redeemed over the course of a few years through the use of a mandatory sinking reserve fund.

Figure 2 displays the redemption schedule for the Series A bonds, consisting of the serial bonds and the term bonds. Of the $113.325 million issued in Series A, $70.61 million matures between 2004 and 2023, with the amounts escalating from $0.74 million due in 2004 to $7.145 million due in 2023. These serial bonds are then followed by term bonds totaling $42.725 million in 2028, in redemptions of $7.65 million in 2024, $8.24 million in 2025, $8.87 million in 2026, $9.52 million in 2027, and $8.45 million in 2028. In order to compute the subsidy stemming from the tax exemption for the bonds that make up the Series A issuance, we multiply the interest rate spread in the year of the issuance (2002) by the redemption amount in each individual column in Figure 2, summing across the years until maturity (discounting at 3 or 5 percent). The present value subsidy for Series A is estimated as $41 million or $34 million, corresponding to discount rates of 3 and 5 percent, respectively.

## RESULTS

We examine the financing for all professional sports stadiums newly constructed, majorly renovated, or currently under construction since 2000 for Major League Baseball, the National Football League, the National Basketball Association, and the National Hockey League. We obtained estimates of the total costs of the stadiums from various sources, such as local newspaper articles and websites.[12] We obtain the majority of the bond data from the original issuance documentation available through Electronic Municipal Market Access, a service of the Municipal Securities Rulemaking Board. See the Data Appendix for more information.

Table 3 shows descriptive data for the 45 professional sports stadiums constructed or majorly renovated since 2000, consisting of 43 that underwent construction[13] and two that underwent major renovation.[14] The average major renovation cost was $423 million compared to an average construction cost of $618 million. Table 3 also designates the 36 stadiums that were funded, at least in part, with proceeds from tax-exempt municipal bonds. The table also documents the league, the year of construction or major renovation, the year of bond issuance, the total costs, and the amount financed through proceeds from tax-exempt bonds.

Column 6 of Table 3 shows the estimated cost (in 2014 dollars) of constructing or renovating each of the major sports stadiums between 2000 and 2014. The total cost across all the stadiums is nearly $28 billion, and the most expensive stadium was (by far) Yankee Stadium, at over $2.5 billion. Column 7 shows the amount of the costs (in 2014 dollars) financed by tax-exempt bonds for each of the stadiums. The total financing across all the stadiums is roughly $13 billion, and the stadium that relied on the most tax-exempt financing was Yankee Stadium, which relied on nearly $1.7 billion in tax-exempt bonds to finance the stadium and its parking facility.[15]

Table 4 shows federal subsidy and revenue loss estimates for the 45 stadiums, in undiscounted terms and discounted at the 3 and 5 percent levels. Columns 5 and 6 of Table 4 show the present value estimates of the federal subsidy for each stadium, and Columns 7 and 8 show the present value estimates of the federal revenue loss, using discount rates of 3 and 5 percent, respectively. Note that the estimated subsidy value is not in constant proportion to the amount of the costs financed by tax-exempt bonds because the former is also a function of the term structure of the bonds and the interest rate spread at the time of the issuance. For example, construction of US Bank Stadium, which opened in 2016 for the NFL's Minnesota Vikings, was financed with $392 million in tax-exempt bonds issued in 2014, but has a federal subsidy estimate of only about 10 percent of the principal amount. Soldier Field, which was renovated in 2003 for the Chicago Bears, was funded with $399 million in tax-exempt bonds ($533 million in 2014 dollars), but has a federal subsidy estimate of over 30 percent of the principal amount. The different subsidy amounts are partly due to differences in the interest rate spread between when the Soldier Field bonds were issued (2.13 percentage points) and when the US Bank Stadium bonds were issued (0.62 percentage points). They are also due to the different term structures of the bonds, since the Soldier Field bonds are heavily weighted to come due in the far future and the US Bank Stadium bonds will be paid off in installments that slowly escalate in amount. The largest subsidy went to Yankee Stadium, with a subsidy value of $431 million computed at a 3 percent discount rate and $339 million computed at a 5 percent discount rate.[16] Recall that, due to the inefficiency of tax exemption, the subsidy value to the bond issuers is estimated to be only a fraction of the total reduction in tax revenue, because municipal bond holders in higher tax brackets receive windfall benefits.

The first row of Table 5 reproduces the last row of Table 4, reporting the total subsidy and revenue losses across all the stadiums using average yields for 20-year municipal bonds rated Aa by Moody's Investors Service compared to average yields for seasoned corporate bonds rated Aa by

12 Ford Field, home of the NFL's Detroit Lions, is reported to have cost $430 million to build, of which $219 million was financed by tax-exempt revenue bonds issued by Wayne County (Anderson and Pirics, 2015, Appendix 3). We were only able to locate documentation for $16.965 million in bonds issued in 1997 by the City of Detroit. Results for Ford Field, therefore, are likely underestimates.
13 This includes Little Caesars Arena, future home of the NHL's Detroit Red Wings, which is currently under construction.
14 Chesapeake Energy Arena, home of the NBA's Oklahoma City Thunder, was both constructed and renovated since 2000.

15 Citizens Bank Park, FedExForum, Great American Ball Park, Lucas Oil Stadium, Paul Brown Stadium, and Toyota Center relied on tax-exempt municipal bonds to finance at least 90 percent of their total costs.
16 The three New York stadiums financed by PILOT bonds—Yankee Stadium, Citi Field, and the Barclays Center—received nearly one quarter of the total federal subsidies: $739 million and $583 million using discount rates of 3 and 5 percent, respectively.

Moody's. We find that for these 45 stadiums, the total discounted value of the federal tax subsidy is $3.2 billion (using a 3 percent discount rate) or $2.6 billion (using a 5 percent discount rate). Given the inefficiency of the tax exemption, the lost revenue to the federal government exceeds the subsidy amounts, resulting in an estimated revenue loss of $3.7 billion (using a 3 percent discount rate) or $3.0 billion (using a 5 percent discount rate). The other rows of Table 5 compute estimates using alternative measures of bond yields for the municipal bonds and the comparable taxable bonds. The findings are fairly robust with respect to the indexes used.[17]

Table 6 shows the number of stadiums constructed or renovated since 2000 by each major sports league, the number financed by tax-exempt bonds, the average cost of the stadiums, the average financed by tax-exempt bonds, and the average present value subsidies computed at both 3 and 5 percent discount rates (all in 2014 dollars). The NFL stadiums had the highest average cost at $777.5 million, but the MLB had the highest average amount financed by tax-exempt bonds at $449.3 million. The highest subsidies went to the MLB, with an estimated value of $117.6 million computed at a 3 percent discount rate and $94.5 million computed at a 5 percent discount rate.

## REFORM OPTIONS

The most direct and simplest reform option would be to eliminate the authority to issue federal tax-exempt governmental bonds for stadiums. As discussed earlier, TRA86 categorized a bond as private if it met two conditions: (i) the private business use test: more than 10 percent of the bond proceeds were to be used by a nongovernmental entity, and (ii) the private payment test: more than 10 percent of the debt service was secured by property used directly or indirectly in a private business. Eliminating the private payment test for stadium financing would mean that bonds to finance stadiums would be taxable private activity bonds if more than 10 percent of the facility is used for private business use, which undoubtedly would be the case. The Joint Committee on Taxation (2005) and the Obama administration's previous two budgets (U.S. Department of Treasury, 2015, 2016) proposed this elimination of the private payment test for stadium financing in order to eliminate the federal subsidy.

An alternative approach would limit rather than eliminate the federal tax subsidy for stadium financing. As mentioned earlier, current law allows the tax exemption for bonds used to finance any of a list of qualified private activities (stadium financing was removed from the list with TRA86), with the total volume of tax-exempt qualified private activity bonds capped for each state. The federal subsidy could be curtailed by denying governmental bond financing for stadiums (by eliminating the private payment test), while allowing stadium financing through tax-exempt qualified private activity bonds.[18] As discussed by Lathrope (1997) and Zimmerman (1997, 2008), this policy change would have several effects, including forcing states to choose between federal tax subsidy for stadium financing versus for other qualified financing under the volume cap; allowing state and local governments to use taxes directed at the beneficiaries of the stadiums to finance the tax-exempt bonds; and eliminating the tax subsidy for stadium luxury boxes, since the law does not allow

17 The bottom two rows are the methodologies used by the Joint Committee on Taxation (2008, 2012a, 2012b, 2013).
18 Gans (2010) proposes a compromise, whereby only renovations to existing stadiums could be considered qualified private activity, and that a stadium may only be renovated every 20 years.



the proceeds from tax-exempt qualified private activity bonds to finance such things. Additionally, current law requires that such bonds be expressly approved by either a voter referendum or by an elected representative after a public hearing following reasonable notice to the public, which would increase the transparency of stadium deals that benefit from tax-exempt financing (Internal Revenue Service, 2016).

The above reform options are targeted specifically at federal subsidies for sports stadiums. A broader reform would deal with the inefficiencies of tax-exempt bond financing in general, not just stadium financing, which would allow the federal government to maintain the current subsidy incentives, but at lower cost to the federal budget. Recall that tax-exempt bonds are an economically inefficient means of providing a subsidy because the value to the bond issuers is only a fraction of the total reduction in tax revenue, as bondholders in higher tax brackets receive windfall gains. This inefficiency could be eliminated by changing the tax exemption to a tax credit, either in the form of what is known as "tax-credit bonds" or "direct-pay bonds."

A tax-credit bond provides a credit against the bondholder's overall federal income tax liability. In addition to eliminating the inefficiency associated with tax-exempt bonds, tax-credit bonds also have the advantage of flexibility, in that the amount of the tax credit could vary depending on the purpose for which the bond is issued (ideally setting the federal subsidy to the amount that is economically justified on public good grounds). There is some, albeit limited and recent, history of federal use of tax-credit bonds. Most recently, the American Recovery and Reinvestment Act of 2009 created Build America Bonds (issued only in 2009 and 2010) that set a tax credit for bondholders of 35 percent of the interest. The bondholder must report both the interest payment and the credit as taxable.

A direct-pay bond provides a credit to the bond issuer in an amount equal to a portion of each of the interest payments the issuer makes to the bondholder. For example, issuers of Build America Bonds can elect to be issued direct-pay bonds and receive a credit equal to 35 percent of the taxable interest paid to the bondholders. In addition to eliminating the inefficiency associated with tax-exempt bonds, direct-pay bonds—since they directly subsidize interest payments—would be subject to the federal government's annual appropriations limit. Tax-exempt municipal bonds are outside of the appropriation process, reducing their transparency and limiting Congress's control over the allocation.[19]

## CONCLUSIONS

Proponents of government subsidies for sports stadiums typically justify them on the grounds that stadiums provide spillover gains to the local economy. The evidence for these spillover gains is weak. Academic studies consistently find no discernible positive relationship between sports facility construction and local economic development, income growth, or job creation. Even if one believes, contrary to the empirical evidence, that the spillover benefits to the local economy justify subsidies, there still remains no economic justification for federal subsidies for sports stadiums. Under current

19 For more detailed discussions of tax-credit bonds and direct-pay bonds (also known as a "taxable bond option"), see Congressional Budget Office (2004), Joint Committee on Taxation (2012b), and Congressional Budget Office and Joint Committee on Taxation (2009).

tax law, stadium financing is eligible for tax-exempt status, which amounts to a substantial federal subsidy. What's more, current tax law provides a perverse incentive for a federal government match for state and local government subsidies for stadiums, and it provides a disincentive for local governments to finance the stadium subsidies by taxes that largely fall on those receiving the benefits of the stadium.

We examine the financing for all professional sports stadiums newly constructed, majorly renovated, or currently under construction since 2000 for Major League Baseball, the National Football League, the National Basketball Association, and the National Hockey League. We find that for these 45 stadiums, the discounted value of the federal tax subsidy is $3.2 billion (using a 3 percent discount rate) or $2.6 billion (using a 5 percent discount rate). Given the inefficiency of the tax exemption, the lost revenue to the federal government exceeds the subsidy amounts, resulting in an estimated revenue loss of $3.7 billion (using a 3 percent discount rate) or $3.0 billion (using a 5 percent discount rate).

The simplest and most direct way to address this inefficient federal subsidy would be to eliminate the private payment test for sports stadiums, which would eliminate the authority to issue federal tax-exempt governmental bonds for stadiums. Short of that, an alternative approach would limit the federal tax subsidy by classifying stadium bonds as qualified private activity bonds, which would make them subject to a state-wide volume cap, place additional restrictions on their use, and allow financing of the bonds through taxes directed at the beneficiaries of the stadiums.



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**Table 1. Total Expenditures on Transportation and Water Infrastructure, 2014**

| | *Public* | | | | | | |
|---|---|---|---|---|---|---|---|
| | *Federal* | | | | | | |
| | *Direct expenditure* | *Grants and loan subsidies* | *Total federal* | *State/local* | *Total public* | *Private* | *Total* |
| Highways | 1.5 | 44.9 | 46.4 | 118.3 | 164.7 | 0.0 | 164.7 |
| Rail | 0.3 | 2.7 | 3.0 | n.a. | 3.0 | 9.7 | 12.7 |
| Mass transit | 0.2 | 12.3 | 12.5 | 52.9 | 65.4 | 0.2 | 65.6 |
| Aviation | 12.9 | 3.2 | 16.1 | 20.0 | 36.1 | 1.0 | 37.1 |
| Water transportation | 4.2 | 0.1 | 4.3 | 5.6 | 9.9 | 0.3 | 10.2 |
| Water resources | 9.8 | 0.1 | 9.9 | 18.3 | 28.2 | 0.0 | 28.2 |
| Water utilities | 0.0 | 4.4 | 4.4 | 104.5 | 108.9 | 0.8[a] | 109.7 |
| **Total** | **28.9** | **67.7** | **96.6** | **319.6** | **416.2** | **12.0** | **428.2** |

*Sources*: For public investment, Congressional Budget Office (2015); for private investment, Bureau of Economic Analysis (2015).
*Notes*: Units are billions of 2014 dollars. Total expenditure includes capital investment, and operation and maintenance costs.
a. Includes waste management and remediation services.

**Table 2. Bond Issuance Structure for the Funding of FedExForum, 2002**

| *Series* | *Total principal value (2002 dollars)* | *Total principal value (2014 dollars)* | *Type of bond* |
|---|---|---|---|
| A | $113,325,000.00 | $149,127,888.83 | Serial and term |
| B | $88,965,000.00 | $117,071,807.89 | Serial and term |
| C | $18,535,000.00 | $24,390,782.43 | Term |
| D | $2,699,414.55 | $3,552,243.48 | Capital appreciation |
| E | $1,300,890.80 | $1,711,882.63 | Capital appreciation |

*Source*: Electronic Municipal Market Access, a service of the Municipal Securities Rulemaking Board.

**Table 3. Descriptive Data**

| (1) Stadium | (2) Team (League) | (3) Use of tax-exempt municipal bonds | (4) Year completed | (5) Year of bond issuance | (6) Total cost of stadium (millions)[a] | (7) Tax-exempt municipal bonds issued (millions)[a] |
|---|---|---|---|---|---|---|
| American Airlines Arena | Miami Heat (NBA) | | 2000 | n.a. | $293 | n.a. |
| American Airlines Center | Dallas Mavericks (NBA)[b] | × | 2001 | 1998 | $561 | $152 |
| Amway Center | Orlando Magic (NBA) | × | 2010 | 2008 | $521 | $342 |
| AT&T Center | San Antonio Spurs (NBA) | × | 2002 | 2000 | $245 | $169 |
| AT&T Park | San Francisco Giants (MLB) | | 2000 | n.a. | $491 | n.a. |
| AT&T Stadium | Dallas Cowboys (NFL) | × | 2009 | 2005 | $1,318 | $337 |
| Barclays Center | Brooklyn Nets (NBA)[c] | × | 2012 | 2009 | $1,031 | $564 |
| Busch Stadium | St. Louis Cardinals (MLB) | | 2006 | n.a. | $429 | n.a. |
| CenturyLink Field | Seattle Seahawks (NFL) | × | 2002 | 1999 | $515 | $142 |
| | | | | 2000 | | $268 |
| Chesapeake Energy Arena | Oklahoma City Thunder (NBA) | | 2002 | n.a. | $117 | n.a. |
| | | | 2008 | n.a. | $134 | n.a. |
| Citi Field | New York Mets (MLB) | × | 2009 | 2006 | $817 | $643 |
| | | | | 2009 | | $91 |
| Citizens Bank Park | Philadelphia Phillies (MLB) | × | 2004 | 2001[d] | $574 | $214 |
| Comerica Park | Detroit Tigers (MLB) | × | 2000 | 1997 | $412 | $127 |
| Consol Energy Center | Pittsburgh Penguins (NHL) | × | 2010 | 2007 | $348 | $288 |
| FedExForum | Memphis Grizzlies (NBA) | × | 2004 | 2002 | $313 | $296 |
| Ford Field | Detroit Lions (NFL) | × | 2002 | 1997 | $658 | $25[g] |
| Gila River Arena | Arizona Coyotes (NHL) | × | 2003 | 2002 | $283 | $37 |
| | | | | 2003 | | $64 |
| Gillette Stadium | New England Patriots (NFL) | | 2002 | n.a. | $542 | n.a. |
| Great American Ball Park | Cincinnati Reds (MLB) | × | 2003 | 2000[h] | $418 | $386 |
| Heinz Field | Pittsburgh Steelers (NFL) | × | 2001 | 1999[i] | $376 | $125 |
| Lambeau Field | Green Bay Packers (NFL) | × | 2003 | 2001 | $380 | $143 |
| Levi's Stadium | San Francisco 49ers (NFL) | | 2014 | n.a. | $1,310 | n.a. |
| Lincoln Financial Field | Philadelphia Eagles (NFL) | × | 2003 | 2001[d] | $666 | $214 |
| Little Caesars Arena | Detroit Red Wings (NHL) | × | 2017[e] | 2014 | $450[f] | $250 |
| Lucas Oil Stadium | Indianapolis Colts (NFL) | × | 2008 | 2005 | $792 | $485 |
| | | | | 2007 | | $242 |
| | | | | 2008 | | $60 |
| Marlins Park | Miami Marlins (MLB) | × | 2012 | 2009 | $654 | $347 |
| | | | | 2010 | | $147 |
| MetLife Stadium | New York Jets/Giants (NFL) | | 2010 | n.a. | $1,737 | n.a. |
| Miller Park | Milwaukee Brewers (MLB) | × | 2001 | 1996 | $535 | $221 |
| | | | | 1997 | | $86 |
| | | | | 1999 | | $60 |
| Minute Maid Park | Houston Astros (MLB) | × | 2000 | 1998 | $344 | $229 |
| Nationals Park | Washington Nationals (MLB) | × | 2008 | 2006 | $846 | $446 |
| Nationwide Arena | Columbus Blue Jackets (NHL) | | 2000 | n.a. | $241 | n.a. |
| NRG Stadium | Houston Texans (NFL) | × | 2002 | 2000 | $624 | $423 |



**Table 3. Descriptive Data (cont.)**

| (1) Stadium | (2) Team (League) | (3) Use of tax-exempt municipal bonds | (4) Year completed | (5) Year of bond issuance | (6) Total cost of stadium (millions)[a] | (7) Tax-exempt municipal bonds issued (millions)[a] |
|---|---|---|---|---|---|---|
| Paul Brown Stadium | Cincinnati Bengals (NFL) | × | 2000 | 1998 | $619 | $500 |
| Petco Park | San Diego Padres (MLB) | × | 2004 | 2002 | $572 | $223 |
| PNC Park | Pittsburgh Pirates (MLB) | × | 2001 | 1999[h] | $350 | $125 |
| Prudential Center | New Jersey Devils (NHL) | × | 2007 | 2004 | $428 | $239 |
| Soldier Field | Chicago Bears (NFL) | × | 2003 | 2001 | $755 | $533 |
| Sports Authority Field | Denver Broncos (NFL) | × | 2001 | 1999 | $536 | $348 |
| Target Field | Minnesota Twins (MLB) | × | 2010 | 2007 | $591 | $171 |
| | | | | 2008 | | $211 |
| Time Warner Cable Arena | Charlotte Hornets (NBA) | × | 2005 | 2003 | $321 | $229 |
| Toyota Center | Houston Rockets (NBA) | × | 2003 | 2001 | $302 | $304 |
| University of Phoenix Stadium | Arizona Cardinals (NFL) | × | 2006 | 2003 | $534 | $286 |
| | | | | 2005 | | $64 |
| US Bank Stadium | Minnesota Vikings (NFL) | × | 2016[e] | 2014 | $1,079[f] | $392 |
| Xcel Energy Center | Minnesota Wild (NHL) | | 2000 | n.a. | $234 | n.a. |
| Yankee Stadium | New York Yankees (MLB) | × | 2009 | 2006 | $2,538 | $1,107 |
| | | | | 2007 | | $271 |
| | | | | 2009 | | $286 |
| Total | | 36 | | | $27,833 | $13,008 |

*Sources*: See the Data Appendix.
*Notes*: Estimates are in 2014 dollars.
a. Includes ancillary structures, such as parking and infrastructure improvements.
b. Stadium shared with the Dallas Stars (NHL).
c. Stadium shared with the New York Islanders (NHL).
d. Bond split between Citizens Bank Park and Lincoln Financial Field.
e. Projected year of completion; stadium is currently under construction.
f. Projected cost.
g. This is likely an underestimate, and reflects only the bonds issued by the City of Detroit; a substantial amount of bonds (on the order of $100 million) are believed to have been issued by Wayne County, and are missing from our data set.
h. Bond split between Great American Ball Park and Paul Brown Stadium.
i. Bond split between Heinz Field and PNC Park.

**Table 4. Subsidy and Revenue Loss Estimates**

| (1) Stadium | (2) Team (League) | (3) Undiscounted subsidy (millions) | (4) Undiscounted revenue loss (millions) | (5) Discounted (3%) subsidy (millions) | (6) Discounted (5%) subsidy (millions) | (7) Discounted (3%) revenue loss (millions) | (8) Discounted (5%) revenue loss (millions) |
|---|---|---|---|---|---|---|---|
| American Airlines Arena | Miami Heat (NBA) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| American Airlines Center | Dallas Mavericks (NBA)[a] | $54 | $61 | $39 | $32 | $44 | $36 |
| Amway Center | Orlando Magic (NBA) | $100 | $134 | $70 | $57 | $93 | $76 |
| AT&T Center | San Antonio Spurs (NBA) | $53 | $56 | $41 | $36 | $44 | $38 |
| AT&T Park | San Francisco Giants (MLB) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| AT&T Stadium | Dallas Cowboys (NFL) | $84 | $131 | $56 | $45 | $88 | $70 |
| Barclays Center | Brooklyn Nets (NBA)[b] | $182 | $239 | $122 | $98 | $161 | $129 |
| Busch Stadium | St. Louis Cardinals (MLB) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| CenturyLink Field | Seattle Seahawks (NFL) | $118 | $127 | $94 | $81 | $101 | $88 |
| Chesapeake Energy Arena | Oklahoma City Thunder (NBA) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Citi Field | New York Mets (MLB) | $285 | $328 | $185 | $146 | $214 | $169 |
| Citizens Bank Park | Philadelphia Phillies (MLB) | $95 | $95 | $68 | $57 | $68 | $57 |
| Comerica Park | Detroit Tigers (MLB) | $54 | $56 | $39 | $32 | $41 | $34 |
| Consol Energy Center | Pittsburgh Penguins (NHL) | $88 | $90 | $64 | $53 | $65 | $54 |
| FedExForum | Memphis Grizzlies (NBA) | $120 | $120 | $87 | $72 | $87 | $72 |
| Ford Field | Detroit Lions (NFL) | $9 | $9 | $7 | $6 | $7 | $6 |
| Gila River Arena | Arizona Coyotes (NHL) | $26 | $30 | $20 | $17 | $23 | $19 |
| Gillette Stadium | New England Patriots (NFL) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Great American Ball Park | Cincinnati Reds (MLB) | $197 | $208 | $134 | $108 | $142 | $115 |
| Heinz Field | Pittsburgh Steelers (NFL) | $57 | $64 | $40 | $32 | $44 | $36 |
| Lambeau Field | Green Bay Packers (NFL) | $48 | $48 | $35 | $30 | $35 | $30 |
| Levi's Stadium | San Francisco 49ers (NFL) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Lincoln Financial Field | Philadelphia Eagles (NFL) | $95 | $95 | $68 | $57 | $68 | $57 |
| Little Caesars Arena | Detroit Red Wings (NHL) | $35 | $71 | $25 | $20 | $50 | $41 |
| Lucas Oil Stadium | Indianapolis Colts (NFL) | $237 | $311 | $163 | $131 | $214 | $172 |
| Marlins Park | Miami Marlins (MLB) | $147 | $193 | $100 | $80 | $132 | $106 |
| MetLife Stadium | New York Jets/Giants (NFL) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Miller Park | Milwaukee Brewers (MLB) | $145 | $163 | $104 | $85 | $117 | $96 |
| Minute Maid Park | Houston Astros (MLB) | $100 | $113 | $69 | $56 | $78 | $63 |
| Nationals Park | Washington Nationals (MLB) | $132 | $150 | $94 | $78 | $107 | $88 |
| Nationwide Arena | Columbus Blue Jackets (NHL) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| NRG Stadium | Houston Texans (NFL) | $178 | $189 | $129 | $107 | $137 | $114 |
| Paul Brown Stadium | Cincinnati Bengals (NFL) | $229 | $255 | $164 | $135 | $182 | $150 |
| Petco Park | San Diego Padres (MLB) | $95 | $95 | $68 | $56 | $68 | $56 |
| PNC Park | Pittsburgh Pirates (MLB) | $57 | $64 | $40 | $32 | $44 | $36 |
| Prudential Center | New Jersey Devils (NHL) | $67 | $86 | $47 | $38 | $60 | $49 |
| Soldier Field | Chicago Bears (NFL) | $304 | $304 | $205 | $163 | $205 | $163 |
| Sports Authority Field | Denver Broncos (NFL) | $57 | $63 | $49 | $44 | $54 | $50 |
| Target Field | Minnesota Twins (MLB) | $109 | $125 | $79 | $65 | $91 | $75 |
| Time Warner Cable Arena | Charlotte Hornets (NBA) | $75 | $93 | $53 | $43 | $65 | $53 |
| Toyota Center | Houston Rockets (NBA) | $164 | $164 | $112 | $90 | $112 | $90 |



**Table 4. Subsidy and Revenue Loss Estimates (cont.)**

| (1) Stadium | (2) Team (League) | (3) Undiscounted subsidy (millions) | (4) Undiscounted revenue loss (millions) | (5) Discounted (3%) subsidy (millions) | (6) Discounted (5%) subsidy (millions) | (7) Discounted (3%) revenue loss (millions) | (8) Discounted (5%) revenue loss (millions) |
|---|---|---|---|---|---|---|---|
| University of Phoenix Stadium | Arizona Cardinals (NFL) | $102 | $131 | $74 | $61 | $94 | $78 |
| US Bank Stadium | Minnesota Vikings (NFL) | $44 | $88 | $32 | $27 | $65 | $54 |
| Xcel Energy Center | Minnesota Wild (NHL) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Yankee Stadium | New York Yankees (MLB) | $669 | $765 | $431 | $338 | $492 | $386 |
| Total | | $4,610 | $5,314 | $3,206 | $2,609 | $3,691 | $3,002 |

*Sources*: See the Data Appendix.
*Notes*: Estimates are in 2014 dollars.
a. Stadium shared with the Dallas Stars (NHL).
b. Stadium shared with the New York Islanders (NHL).

**Table 5. Results Using Alternative Indexes for Interest Rate Spread**

| *Nontaxable bond index* | *Taxable bond index* | *Undiscounted subsidy (millions)* | *Undiscounted federal revenue loss (millions)* | *Discounted (3%) subsidy (millions)* | *Discounted (5%) subsidy (millions)* | *Discounted (3%) federal revenue loss (millions)* | *Discounted (5%) federal revenue loss (millions)* |
|---|---|---|---|---|---|---|---|
| Moody's Aa-rated 20-year municipal bond average | Moody's Aa-rated corporate bond index | $4,610 | $5,316 | $3,206 | $2,609 | $3,692 | $3,003 |
| Bond Buyer 20-year Municipal Bond Index | Moody's Aa-rated corporate bond index | $4,326 | $5,155 | $3,007 | $2,447 | $3,577 | $2,908 |
| Moody's Aaa-rated 20-year municipal bond average | Moody's Aaa-rated corporate bond index | $4,242 | $5,088 | $2,948 | $2,398 | $3,535 | $2,875 |
| Standard & Poor's high-grade municipal bonds | Moody's Aa-rated corporate bond index | $4,359 | $5,314 | $3,032 | $2,467 | $3,691 | $3,002 |
| Bond Buyer 20-year Municipal Bond Index | Moody's Aaa-rated corporate bond index | $3,543 | $4,931 | $2,465 | $2,007 | $3,422 | $2,782 |
| Standard & Poor's high-grade municipal bonds | Moody's Aaa-rated corporate bond index | $3,576 | $5,088 | $2,490 | $2,027 | $3,535 | $2,875 |

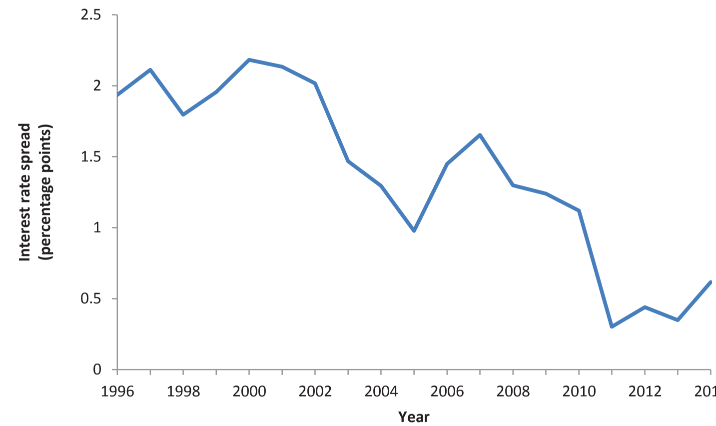
*Sources*: Authors' calculations, based on data from Moody's Investors Service/Bloomberg, The Bond Buyer, and Council of Economic Advisers (2005, 2015).
*Notes*: Estimates are in 2014 dollars. The indexes used in rows three and five result in some annual estimates of negative spreads. For those years, we set the spread to 0 and the ratio of the market-clearing tax rate to the average tax rate of municipal bond holders to 1.

**Table 6. Summary Statistics for New Stadiums by League, 2000–14**

| *League* | *Number of new or renovated stadiums* | *Number financed by tax-exempt bonds* | *Average cost (millions)* | *Average financed by tax-exempt bonds (millions)* | *Average discounted (3%) subsidy (millions)* | *Average discounted (5%) subsidy (millions)* |
|---|---|---|---|---|---|---|
| MLB | 14 | 12 | $683.6 | $449.3 | $117.6 | $94.5 |
| NFL | 16 | 13 | $777.5 | $360.2 | $85.8 | $70.7 |
| NBA[a] | 9 | 7 | $426.6 | $293.7 | $74.9 | $61.1 |
| NHL | 6 | 4 | $330.7 | $219.4 | $38.8 | $32.0 |
| Total or average | 45 | 36 | $618.5 | $361.3 | $89.0 | $72.5 |

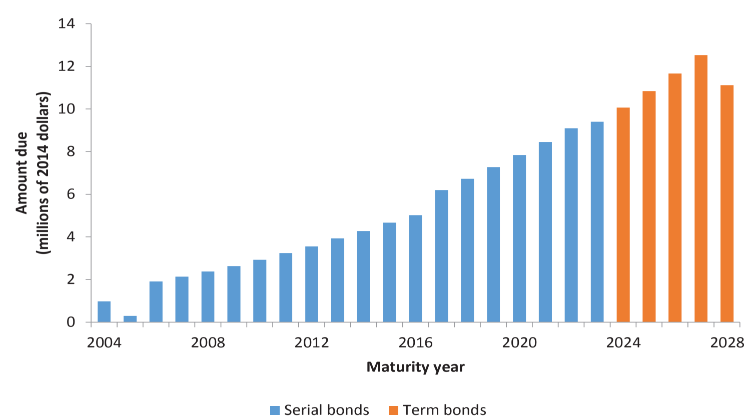
*Sources*: Authors' calculations; see the Data Appendix.
*Notes*: Dollar estimates are in 2014 dollars. The estimates in the final three columns exclude stadiums with no tax-exempt financing.
a. Two NBA arenas are jointly shared with NHL teams, and are counted as NBA arenas in these statistics.

**Figure 1. Interest Rate Spread between Municipal Bonds and Corporate Bonds, 1996–2014**




*Sources*: Moody's Investors Service/Bloomberg.
*Notes*: Interest rates are annual averages. All bonds are rated Aa by Moody's, and have maturities of at least 20 years.

**Figure 2. Redemption Schedule for the FedExForum Series A Bonds, 2004–28**




*Source*: Electronic Municipal Market Access, a service of the Municipal Securities Rulemaking Board.

# Data Appendix

All information about specific stadium bonds comes from official bond issuance documentation, the majority of which is housed on the Electronic Municipal Market Access website at emma.msrb.org. A few bonds were not available on the Electronic Municipal Market Access website, and were instead obtained directly from the issuers. Specifically, the 1999 bond issuance shared jointly with Heinz Field and PNC Park was obtained using a Right to Know request, and was received directly from the Sports & Exhibition Authority; the 2002 bond issuance used to fund Petco Park was obtained directly from the website of the City of San Diego, www.sandiego.gov; the 1997 bond issuance used to fund Ford Field was obtained through email and phone correspondence with a member of the Debt Management Division of the City of Detroit. (All official bond issuance documentation is available in PDF form upon request.)

Estimates for the total costs for the stadium were more difficult to come by than the data on the bonds used to finance them. We collected the cost data primarily from the following websites, and where there were discrepancies across websites on the costs of a specific stadium, we attempted to resolve them by consulting other sources, such as online local newspaper articles.

- *Sports Facility Reports* (Anderson and Pirics, 2015), by the National Sports Law Institute of Marquette University Law School
  - MLB: law.marquette.edu/assets/sports-law/pdf/MLB.15.pdf
  - NBA: law.marquette.edu/assets/sports-law/pdf/NBA.15.pdf
  - NFL: law.marquette.edu/assets/sports-law/pdf/NFL%202015.pdf
  - NHL: law.marquette.edu/assets/sports-law/pdf/NHL.15.pdf

- www.ballparks.com, by Paul Munsey and Cory Suppes
  - MLB: www.ballparks.com/baseball
  - NBA: basketball.ballparks.com
  - NFL: football.ballparks.com
  - NHL: hockey.ballparks.com

- www.stadiumtravelguide.com, by Stadium Travel Guide
  - MLB: www.ballparksofbaseball.com
  - NBA: www.insidearenas.com
  - NFL: www.stadiumsofprofootball.com

- "NFL Stadium Funding Information: Stadiums Opened Since 1997," by Conventions, Sports & Leisure International, cbsminnesota.files.wordpress.com/2011/12/nfl-funding-summary-12-2-11.pdf

# Exhibit F

COLORADO ROCKIES

# Gov. Polis will be 'burning up the phones' to bring MLB All-Star Game to Colorado

With the league moving the 2021 game from Atlanta due to a new voter law, Colorado Governor Jared Polis wants to bring it to Denver.

Author: **Will Petersen (9News)**
Published: **10:03 PM MDT April 4, 2021**
Updated: **10:03 PM MDT April 4, 2021**

DENVER — Coors Field and the city of Denver will host the 2021 MLB All-Star Game if Gov. Jared Polis (D-Colorado) gets his wish.

The league announced earlier this week the game will be moved out of Atlanta due to a new law in Georgia that restricts voting rights.

On Friday night, The Athletic reported Coors Field and the Rockies were a candidate to host the game that is looking for a new city. 9NEWS reached out to Polis' office on Sunday night and received the following statement:

"The Governor knows that Colorado is the best home for the All-Star Game, especially because Colorado also has strong laws that enable voters to cast their legal ballots any way they choose including through mail or in person. The Governor will be burning up the phones the next few days to see if there is an opening to bring the All-Star game to Denver."

Several other Colorado representatives, including Diana DeGette and Jena Griswold, have tweeted in recent days they would like to see the game played in Denver.

**Rep. Diana DeGette**
@RepDianaDeGette

The @MLB should give Denver a call.

Colorado would be thrilled to host the 2021 All-Star Game.

1:08 PM · Apr 3, 2021

848 54 Copy link to Tweet

**Jena Griswold**
@JenaGriswold

Denver is a natural choice to host the 2021 #ASG. Colorado has accessible, secure elections & according to Rockies pitcher Jon Gray the home run derby would be epic.

> **Jake Tapper** @jaketapper
> Major League Baseball will relocate from Atlanta GA to another host city this season's All-Star Game and MLB Draft "to demonstrate our values as a sport" bc MLB "fundamentally supports voting rights for all Americans and opposes restrictions to the ballot box," Commish says

10:33 PM · Apr 2, 2021

778 52 Copy link to Tweet

The Rockies and Colorado last hosted the All-Star Game in 1998 and are not currently scheduled to host in the coming years.

The organization declined to comment on the possibility when reached by 9NEWS on Sunday afternoon.

*>> Video above: Rockies manager Bud Black talks 2021 expectations with 9NEWS Sports Director Rod Mackey*

**RELATED:** MLB pulls All-Star Game, Draft out of Atlanta over controversial election law

**RELATED:** Nolan Who? Rockies beat Kershaw, World Series champion Dodgers, 8-5 on gorgeous Opening Day

**RELATED:** Rockies manager Bud Black on 2021 expectations: 'Anytime you make the playoffs,